

Spring



POS

- POS Terminal
- KIOSK
- Handy POS
- Peripheral



IPC

- Industrial CPU Board
- Wall & Rack Mount System
- Applied Computer
- Panel PC
- Full IP66/IP69K Panel PC
- Open Frame Computer
- Industrial Monitor
- IIoT Edge Controller
- Remote I/O Module

2020

POS & IPC

SELECTION GUIDE

POS Terminal



Payment POS

Selection Guide



Model		PA-R110	PA-1822	PA-1922
QR Code				
Pictures				
Dimensions (W x H x D)		382 x 638.3 x 297.1 mm	450 x 600 x 600 mm	450 x 540 x 530 mm
Weight		Without packing approx. 20 kg	Without packing approx. 50 kg With packing approx. 60 kg (Exclusive of Cash)	Without packing approx. 40 kg With packing approx. 50 kg (Exclusive of Cash)
Power Supply		AC 100-240V available		
Certifications		EMI: Class A; ESD: Air 8KV / Contact 4KV		
O.S. Support		Windows 10 IoT Enterprise / POSReady 7		
Temperature		Operating: 0°C~35°C; Storage: -20°C~60°C		
Humidity		Operating & Storage: 20%~85% (no condensation)		
I/O Ports (in rear lower of cube-body)	Power Input	1 x D-type socket, AC 100V-240V available		
	Power Switch	1 x Power button		
	USB	3 x USB Type-A	4 x USB Type-A	
	RS232	3 x RJ45	1 x RJ45	
	LAN Port	1 x RJ45		
Panel-PC	LCD	15" TFT LCD/ Resolution: 1024 x 768/ Brightness: 250 cd/m²		
	Touchscreen	5-wire analog resistive or projected capacitive	5-wire analog resistive	
	CPU	Intel® Celeron® J1900		
	Memory	1 x DDR3L SO-DIMM (default 4GB, up to 8GB)		
	Storage	1 x 2.5" SATA		
	Options	Vertical MSR & iButton (JIS-I or II, ISO Track1+2+3) Vertical Fingerprint (8-bit grayscale reader)		
Note Acceptor & Recycling Units Capacity		--	Option 1 Acceptor: 300 notes 2 recycling units, each for 30 notes Option 2 Acceptor: 400 notes 2 recycling units, each for 100 notes	Acceptor: 300 notes 2 recycling units, each for 30 notes
Coin Acceptor		--	Bulk acceptance	Coin-by-coin
Hopper Capacity		--	About €1 x 1300 pcs	
Touch Display		--	10.4" 5-wire resistive touch & XGA LCD	
Thermal Printer		2" or 3" standalone thermal printer for 58 mm or 80 mm paper roll	Epson 3" thermal printer module, support up to 130 mm paper roll	
Barcode Reader		1D: UPC-A, UPC-E, EAN-8, EAN-13, UCC/EAN-128, Code 39, Code 93, Interleaved 2 of 5, Codabar, MSI, GS1 Databar 2D: PDF417, MicroPDF417, DataMatrix, QR Code, MaxiCode		

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

All in One

Selection Guide



Model		PA-A310	PA-3211	PA-3222	PA-3122	PA-6622	PA-8225
QR Code							
Pictures							
LCD Display		10.1" TFT LCD	10.1" TFT LCD	10.1" TFT LCD	10.4" TFT LCD	10.4" TFT LCD	10.4" TFT LCD
CPU Support		Celeron® J3355 / 3455	ARM Cortex-A9	Celeron® J1900	Celeron® J1900	Celeron® J1900	Celeron® J1900
Max. CPU Speed		2.0 GHz	--	2.0 GHz	2.0 GHz	2.0 GHz	2.0 GHz
Chipset		Built-in CPU	Built-in CPU	Built-in CPU	Built-in CPU	Built-in CPU	Built-in CPU
Max. System Memory		8GB	1GB	8GB	8GB	8GB	8GB
BIOS		AMI	NA	AMI	AMI	AMI	AMI
Audio		Realtek ALC888	Built-in CPU	Realtek ALC888	Realtek ALC888	Realtek ALC888	Realtek ALC888
I/O Ports	USB	5 x Type A Female 1 x 12V or 24V Powered USB (option)	2 x Type A female	5 x Type A female	5 x Type A female	5 x Type A female	4 x Type A female
	LAN	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45
	Display	1 x HDMI 1 x VGA (option)	1 x VGA	1 x VGA	1 x VGA	1 x VGA	1 x VGA
	Cash Drawer	1 + 1 (option) x RJ11	1 x RJ11	1 + 1 (option) x RJ11	1 + 1 (option) x RJ11	1+1 (option) xRJ11	1 + 1 (option) x RJ11
	COM Ports	3 x RJ45 + 1 (option) DB9	1 x DB9	3 x RJ45 + 1 (option) DB9	3 + 1 (option) DB9	3 + 1 (option) DB9	3 x DB9
	Keyboard / Mouse	--	--	--	--	--	--
	Line Out	1 x phone jack	--	--	1 x phone jack	1 x phone jack	1 x phone jack
	Mic In	--	--	--	--	--	--
	Parallel Port	--	--	--	1 x DB25 (option)	1 x DB25 (option)	--
Drive Bays		1 x 2.5" SATA HDD	16GB eMMC on board	1 x 2.5" SATA	1 x 2.5" SATA 1 x mSATA	1 x 2.5" SATA	1 x 2.5" SATA
Touchscreen		10.1" capacitive	10.1" capacitive	10.1" capacitive	5-wire analog resistive	5-wire analog resistive	5-wire analog resistive
Power Supply		60W~90W adaptor	60W adaptor	60W~90W adaptor	72W~120W adaptor	72W~120W adaptor	72W~120W adaptor
Dimensions (WxHxD) mm		299 x 148 x 300	299 x 148 x 300	299 x 148 x 300	299 x 148 x 300	320 x 172.3 x 315	296 x 159 x 338
Weight (approx)		4 kg	4 kg	4 kg	4.5 kg	5 kg	5 kg
Options		Printer, customer display, MSR, fingerprint, i-Button reader, RFID Barcode Scanner	Printer, customer display, MSR	Printer, customer display, MSR, fingerprint, i-Button reader, RFID	Printer, customer display, MSR, fingerprint, RFID	Printer, customer display, MSR, fingerprint, RFID	Printer, customer display, MSR, fingerprint, RFID
O.S. Support		Windows 10	Android 5.1	Windows 10 Windows 8.1 POSReady 7 Android 4.4	Windows 10 Windows 8.1 POSReady 7 Android 4.4	Windows 10 Windows 8.1 POSReady 7 Android 4.4	Windows 10 Windows 8.1 POSReady 7
Certifications		CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

All in One

Selection Guide



Model		PA-6880	PA-8525	PA-6822	PA-3522	PA-A900	PA-A901	PA-3622
QR Code								
Pictures								
LCD Display		15" TFT LCD	15" TFT LCD	15" TFT LCD	15" TFT LCD	15.6" TFT LCD	15.6" TFT LCD	15.6" TFT LCD
CPU Support		Intel® 7th / 6th Gen. Core™ i5 / i3 / Celeron®	Celeron® J1900	Celeron® J1900	Celeron® J1900	Celeron® J3455	Intel® 7th / 6th Gen. Core™ i5 / i3 / Celeron® / Pentium®	Celeron® J1900
Max. CPU Speed		3.2 GHz	2.0 GHz	2.0 GHz	2.0 GHz	3.2 GHz	3.2 GHz	2.0 GHz
Chipset		Built-in CPU	Built-in CPU	Built-in CPU	Built-in CPU	Built-in CPU	Built-in CPU	Built-in CPU
Max. System Memory		16GB	8GB	8GB	8GB	8GB	8GB	8GB
BIOS		AMI	AMI	AMI	AMI	AMI	AMI	AMI
Audio		Realtek ALC888	Realtek ALC888	Realtek ALC888	Realtek ALC888	Realtek ALC888	Realtek ALC888	Realtek ALC888
I / O P O R T S	USB	5 x Type A female	4 x Type A female	5 x Type A female	5 x Type A female	5 x Type A Female 1 x 12V or 24V Powered USB (option)	5 x Type A female	5 x Type A female
	LAN	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45
	Display	1 x VGA	1 x VGA	1 x VGA	1 x VGA	1 x HDMI 1 x VGA (option)	1 x VGA	1 x VGA
	Cash Drawer	1 x RJ11	1 + 1 (option) x RJ11	1 + 1 (option) x RJ11	1 + 1 (option) x RJ11	1 + 1 (option) x RJ11	1 + 1 (option) x RJ11	1 + 1 (option) x RJ11
	COM Ports	3 x DB9 + 1 x RJ45	3 x DB9	3 x DB9	3 + 1 (option) x DB9	3 x RJ45 + 1 (option) DB9	2 x DB9 + 1 x RJ45	3 x RJ45 + 1 (option) DB9
	Keyboard / Mouse	—	--	—	—	—	--	—
	Line Out	—	1 x phone jack	1 x phone jack	1 x phone jack	1 x phone jack	1 x phone jack	—
	Mic In	—	--	—	—	1 x phone jack	--	—
	Parallel Port	—	--	1 x DB25 (option)	1 x DB25 (option)	—	--	—
Drive Bays		1 x 2.5" SATA HDD	1 x 2.5" SATA	1 x 2.5" HDD or SSD 1 x mSATA SSD	1 x 2.5" SATA 1 x mSATA	1 x 2.5" HDD or SSD	1 x 2.5" SATA HDD	1 x 2.5" SATA
Touchscreen		5-wire analog resistive or projected capacitive	5-wire analog resistive or projected capacitive	5-wire analog resistive or projected capacitive	5-wire analog resistive	15.6" capacitive	15.6" ELO capacitive	15.6" capacitive
Power Supply		120W~150W adaptor	72W~120W adaptor	72W~120W adaptor	72W~120W adaptor	60W~90W adaptor	120W~150W adaptor	60W~90W adaptor
Dimensions (WxHxD) mm		390 x 190 x 320	380 x 168 x 378	390 x 190 x 320	360 x 183 x 309	372 x 169 x 315	372 x 169 x 315	391 x 171 x 310
Weight (approx)		7.5 kg	6 kg	7.5 kg	6 kg	5 kg	5 kg	5.5 kg
Options		Printer, customer display, MSR, fingerprint, RFID	Printer, customer display, MSR, fingerprint, RFID	Printer, customer display, MSR, fingerprint, RFID	Printer, customer display, MSR, fingerprint	Printer, customer display, MSR, fingerprint, i-Button reader, RFID Barcode Scanner	Printer, customer display, MSR, fingerprint, i-Button reader, RFID Barcode Scanner	Printer, customer display, MSR, fingerprint
O.S. Support		Windows 10 Windows 8.1 POSReady 7	Windows 10 Windows 8.1 POSReady 7	Windows 10 Windows 8.1 POSReady 7 Android 4.4	Windows 10 Windows 8.1 POSReady 7	Windows 10	Windows 10 Windows 7 POSReady 7	Windows 10 Windows 8.1 POSReady 7
Certifications		CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Standalone Selection Guide



Model		PA-6222 (PPC)	PA-5880 (PPC)	PA-5822 (PPC)	PA-6980 (PPC)
QR Code					
Pictures					
LCD Display		12.1" TFT LCD	15" TFT LCD	15" TFT LCD	15" TFT LCD
CPU Support		Celeron® J1900	Intel® 7th / 6th Gen. Core™ i7 / i5 / i3 / Celeron®	Celeron® J1900	Intel® 7th / 6th Gen. Core™ i7 / i5 / i3 / Celeron®
Max. CPU Speed		2.0 GHz	2.30~3.80 GHz	2.0 GHz	3.6 GHz
Chipset		Built-in CPU	Intel® H110	Built-in CPU	Intel® H110
Max. System Memory		8GB	32GB	8GB	32GB
BIOS		AMI	AMI	AMI	AMI
VGA		Built-in CPU	Built-in CPU	Built-in CPU	Built-in CPU
Audio		Realtek ALC888	Realtek ALC888	Realtek ALC888	Realtek ALC888
I/O Ports	USB	5 x Type A female	5 x Type A female	5 x Type A female	5 x Type A female
	LAN	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45
	VGA	1 x DB15	1 x DB15	1 x DB15	1 x DB15
	Cash Drawer	1 + 1 (option) x RJ11	1 x RJ11	1 x RJ11	1 x RJ11
	COM Ports	3 + 1 (option) x RJ45	1 + 1 (option) x RJ45 2 x DB-9	3 + 1 (option) x RJ45	1 x RJ45 2 + 1 (option) x DB-9
	Keyboard / Mouse	--	--	--	--
	Line Out	1 x phone jack	1 x phone jack	--	1 x phone jack
	Mic In	--	--	--	--
	Parallel Port	--	--	--	--
Drive Bays		1 x 2.5" SATA	1 x 2.5" SATA	1 x 2.5" SATA	1 x 2.5" SATA
Touchscreen		5-wire analog resistive	5-wire analog resistive or projected capacitive	5-wire analog resistive or projected capacitive	5-wire analog resistive or projected capacitive
Power Supply		72W adaptor	120W~150W adaptor	60W~90W adaptor	120W~150W adaptor
Dimensions (WxHxD) mm		320 x 303 x 236 (POS) 320 x 261 x 58 (PPC)	375 x 378.6 x 288.4 (POS) 3375 x 305 x 69.8 (PPC)	375 x 364 x 290 (POS) 375 x 305 x 59.2 (PPC)	367.49 x 319.65 x 265.95 (Normal Stand POS) 367.49 x 398.88 x 274.56 (Printer Stand POS) 367.49 x 281.95 x 74.88 (PPC)
Weight (approx)		5 kg	6.7 kg (POS) / 4.6 kg (PPC)	6.4 kg (POS) / 3.8 kg (PPC)	7 kg
Options		Customer display, MSR, fingerprint	Printer, customer display, MSR, fingerprint, RFID, 2D scanner, camera, i-Button reader	Printer, customer display, MSR, fingerprint, RFID, 2D scanner, camera, i-Button reader	Printer, customer display, MSR, fingerprint, RFID
O.S. Support		Windows 10 Windows 8.1 POSReady 7	Windows 10 Windows 8.1 POSReady 7	Windows 10 Windows 8.1 POSReady 7	Windows 10 Windows 8.1 POSReady 7
Certifications		CE, FCC	CE, FCC	CE, FCC	CE, FCC

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Standalone Selection Guide



Model	PA-6322 (PPC)	PA-6722 (PPC)	PA-6225 (PPC)	PA-5685 (PPC)	PA-7225 (PPC)
QR Code					
Pictures					
LCD Display	15" TFT LCD	15" TFT LCD	15" TFT LCD	15.6" TFT LCD	17" TFT LCD
CPU Support	Celeron® J1900	Celeron® J1900	Celeron® J1900	Kaby Lake U Core™ i3 7100U Pentium® 4415U Celeron® 3965U	Celeron® J1900
Max. CPU Speed	2.0 GHz	2.0 GHz	2.0 GHz	2.2~2.4GHz	2.0 GHz
Chipset	Built-in CPU	Built-in CPU	Built-in CPU	Built-in CPU	Built-in CPU
Max. System Memory	8GB	8GB	8GB	16GB	8GB
BIOS	AMI	AMI	AMI	AMI	AMI
VGA	Built-in CPU	Built-in CPU	Built-in CPU	Built-in CPU	Built-in CPU
Audio	Realtek ALC888	Realtek ALC888	Realtek ALC888	Realtek ALC888	Realtek ALC888
I/O Ports	USB	5 x Type A female	5 x Type A female	5 x Type A female	5 x Type A female
	LAN	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45
	VGA	1 x DB15	1 x DB15	1 x DB15	1 x DB15
	Cash Drawer	1 + 1 (option) x RJ11	1 + 1 (option) x RJ11	1 x DB15	1 + 1 (option) x RJ11
	COM Ports	3 + 1 (option) x RJ45	3 + 1 (option) x RJ45	3 + 1 (option) x RJ45	1 x DB9 + 2 x RJ45 + 1 (option) x RJ45
	Keyboard / Mouse	—	—	—	—
	Line Out	—	—	1 x phone jack	1 x phone jack (option)
	Mic In	—	—	—	1 x phone jack (option)
S	Mic In	—	—	—	—
	Parallel Port	—	—	—	—
Drive Bays	1 x 2.5" SATA	1 x 2.5" SATA	1 x 2.5" SATA	1 x 2.5" SATA	1 x 2.5" SATA
Touchscreen	5-wire analog resistive or projected capacitive	5-wire analog resistive or projected capacitive	5-wire analog resistive or projected capacitive	projected capacitive	5-wire analog resistive or projected capacitive
Power Supply	60W~90W adaptor	60W~90W adaptor	72W~120W adaptor	60W~90W adaptor	72W~120W adaptor
Dimensions (WxHxD) mm	382 x 235 x 321 (POS) 382 x 310 x 55 (PPC)	388 x 234 x 223 (POS) 388 x 300 x 55 (PPC)	377 x 318 x 240 (POS) 377 x 308 x 58 (PPC)	391 x 250 x 49 (POS)	410 x 428 x 227 (POS) 410 x 375 x 62 (PPC)
Weight (approx)	6 kg	6 kg	8 kg	6 kg (POS) / 4 kg (PPC)	9 kg
Options	Printer, customer display, MSR, fingerprint, RFID	Printer, customer display, MSR, fingerprint, RFID	Printer, customer display, MSR, fingerprint, RFID, i-Button reader	Printer, customer display, MSR, fingerprint	Printer, customer display, MSR, fingerprint
O.S. Support	Windows 10 Windows 8.1 POSReady 7	Windows 10 Windows 8.1 POSReady 7	Windows 10 Windows 8.1 POSReady 7	Windows 10	Windows 10 Windows 8.1 POSReady 7
Certifications	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

KIOSK



KIOSK

Selection Guide



Model		KS-M320		KS-M220	
QR Code					
Pictures					
D I S P L A Y	Sizes	32"	32"	21.5"	21.5"
	Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
	Brightness	400 nits	400 nits	500 nits	500 nits
	Backlight Life	30,000 hours	30,000 hours	50,000 hours	50,000 hours
	Touch	P-CAP	P-CAP	P-CAP	P-CAP
O.S. Support		Windows 10 Linux Ubuntu 18.04	Windows 10 Linux Ubuntu 18.04	Windows 10 Windows 7	Windows 10 Windows 7
CPU Support		Intel® Core™ i5-7300U Intel® Core™ i3-7100U Intel® Pentium® 4415U Intel® Celeron® J3455	Intel® Core™ i5-7300U Intel® Core™ i3-7100U Intel® Pentium® 4415U Intel® Celeron® J3455	Intel® Core™ i5-7300U Intel® Core™ i3-7100U Intel® Celeron® J3455	Intel® Core™ i5-7300U Intel® Core™ i3-7100U Intel® Celeron® J3455
Chipset / Graphics		Intel® SoC	Intel® SoC	Intel® SoC	Intel® SoC
Memory		DDR4 16GB	DDR4 16GB	DDR4 4GB DDR3L 4GB	DDR4 4GB DDR3L 4GB
Storage		2.5" HDD or SSD x 1	2.5" HDD or SSD x 1	2.5" HDD or SSD x 1	2.5" HDD or SSD x 1
Speaker		4W x 2	4W x 2	2 Omnidirectional Speaker	2 Omnidirectional Speaker
I / O P O R T S	USB	—	1 Port	1 Port	—
	Serial Port	—	COM Port x 1	COM Port x 1	—
	Ethernet	RJ45 LAN Port x 2	RJ45 LAN Port x 1	RJ45 LAN Port x 1	RJ45 LAN Port x 2
O P T I O N A L A C C E S S O R I E S	Camera	2.1M face camera x 1	2.1M face camera x 1	2.1M face camera x 1	2.1M face camera x 1
	Document Reader	—	—	—	—
	Scanner	1D / 2D Barcode x 1	—	—	1D / 2D Barcode x 1
	MSR	(Reserve for Design in IC card / RFID Reader x 1)	—	—	IC card / ID Reader x 1
	Card Reader	(Reserve for Design in Credit Card Reader)	—	—	(Reserve for Design in Credit Card Reader)
	2nd Display	—	—	—	—
	Wireless Module	Option	Option	Option	Option
	3G / 4G Module	—	—	—	—
	Printer Device	2" or 3" Standalone Thermal printer for 70 mm paper roll	—	—	2" or 3" Standalone Thermal printer for 70 mm paper roll
	Cash Device	—	—	—	Bill / Coin Acceptor and Dispenser
	Sensor	—	—	—	—
	Card Dispenser	—	—	—	—
	UPS	—	—	—	—
IP Rating		IP54 (Front Touch)	IP54 (Front Touch)	IP54 (Front Touch)	IP54 (Front Touch)
Power Supply		AC 100~240V, 50~60HZ	AC 100~240V, 50~60HZ	AC 100~240V, 50~60HZ	AC 100~240V, 50~60HZ
Dimensions (WxHxD) mm		550 x 1720 x 450	500 x 808 x 80	377 x 585 x 70	450 x 1636 x 450
Weight (approx)		64 kg	22 kg	11.77 kg	55.1 kg
Certifications		CE, FCC	CE, FCC	CE, FCC	CE, FCC

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

KIOSK

Selection Guide



Model		KS-1130	KS-1132	KF-7330	KF-7232	KF-7130
QR Code						
Pictures						
D I S P L A Y	Sizes	32"	21.5"	17"	17"	17"
	Resolution	1920 x 1080	1920 x 1080	1280 x 1024	1280 x 1024	1280 x 1024
	Brightness	500 nits	250 nits	350 nits	350 nits	350 nits
	Backlight Life	50,000 hours	30,000 hours	50,000 hours	50,000 hours	50,000 hours
	Touch	P-CAP	P-CAP	P-CAP	P-CAP	P-CAP
O.S. Support		Windows 10 Windows 7 POSReady 7	Windows 10 Windows 7 POSReady 7	Windows 10 Windows 7 POSReady 7	Windows 10 Windows 7 POSReady 7	Windows 10 Windows 7 POSReady 7
CPU Support		Intel® Core™ i5-6500 Intel® Core™ i3-6100 Intel® Celeron® J1900	Intel® Core™ i5-7500T Intel® Core™ i3-7101TE Intel® Celeron® J1900	Intel® Celeron® J1900	Intel® Atom™ J1900	Intel® Celeron® J1900
Chipset / Graphics		Intel® H110 Bay Trail SoC	Bntel® H110 Bay Trail SoC	Bay Trail SoC	Bay Trail SoC	Bay Trail SoC
Memory		DDR4 4GB DDR3L 4GB	DDR4 4GB DDR3L 4GB	DDR3L 4GB	DDR3L 4GB	DDR3L 4GB
Storage		2.5" HDD or SSD x 1	2.5" HDD or SSD x 1	2.5" HDD or SSD x 1	2.5" HDD or SSD x 1	2.5" HDD or SSD x 1
Speaker		4W x 2	4W x 2	2W x 1	4W x 2	5W x 2
I / O P O R T S	USB	—	—	—	—	—
	Serial Port	—	—	—	—	—
	Ethernet	RJ45 LAN Port x 1	RJ45 LAN Port x 1	RJ45 LAN Port x 1	RJ45 LAN Port x 1	RJ45 LAN Port x 1
O P T I O N A L A C C E S S O R I E S	Camera	2.1M face camera x 1	2.1M face camera x 1	2.1M face camera x 1	2.1M face camera x 1	—
	Document Reader	—	—	—	—	Full Page Passport Reader x 1 Swipe Passport Reader x 1
	Scanner	1D / 2D Barcode x 1	1D / 2D Barcode x 1	1D / 2D Barcode x 1	1D / 2D Barcode x 1	1D / 2D Barcode x 1
	MSR	MSR / IC card / RFID Reader x 1	MSR / IC card / RFID Reader x 1	(Reserve for Design in MSR)	RFID Reader x 1	MSR / IC card / RFID Reader x 1
	Card Reader	(Reserve for Design in Credit Card Reader)	(Reserve for Design in Credit Card Reader)	(Reserve for Design in Credit Card Reader)	(Reserve for Design in Credit Card Reader)	EMV L1 Contactless Credit Card Reader x 1
	2nd Display	—	—	18.5" 2nd Display x 1	—	18.5" 2nd Display x 1
	Wireless Module	Option	Option	—	—	—
	3G / 4G Module	—	—	—	—	—
	Printer Device	2" or 3" Standlone Thermal printer for 80mm paper roll	2" or 3" Standlone Thermal printer for 80mm paper roll	2" or 3" Thermal printer for 80mm or 130mm paper roll	2" or 3" Thermal printer for 80mm or 130mm paper roll	2" or 3" Thermal printer for 80mm or 130mm paper roll
	Cash Device	—	—	Bill / Coin Acceptor and Dispenser	Bill / Coin Acceptor and Dispenser	—
	Sensor	—	—	—	Light Sensor x 1	Motion Sensor x 1
	Card Dispenser	—	—	—	—	RFID Card Dispenser x 1
	UPS	—	—	Option	Option	Option
IP Rating		IP54 (Front Touch)	IP54 (Front Touch)	IP54 (Front Touch)	IP54 (Front Touch)	IP54 (Front Touch)
Power Supply		AC 100~240V, 50~60HZ	AC 100~240V, 50~60HZ	AC 100~240V, 50~60HZ	AC 100~240V, 50~60HZ	AC 100~240V, 50~60HZ
Dimensions (WxHxD) mm		With Stand: 580 x 1750 x 600 Without Stand: 500 x 1050 x 152	With Stand: 580 x 1708 x 600 Without Stand: 385 x 1105 x 175	420 x 1474 x 405	670 x 1719 x 450	500 x 1775 x 540
Weight (approx)		With Stand: 78.2 kg Without Stand: 46 kg	With Stand: 67.71 kg Without Stand: 41 kg	100 kg	170 kg	85 kg
Certifications		CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

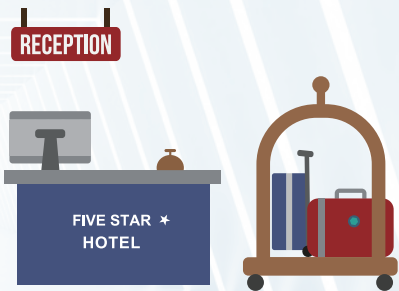
*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Handy POS



Handy POS

Selection Guide



Model		MH-5752	MH-5102	MH-5100	MH-5108	MH-5106
QR Code						
Pictures						
D I S P L A Y	Sizes	7" IPS	10.1" IPS	10.1"	10.1" IPS	10.1"
	Resolution	800 x 1280 pixels	1920 x 1200 pixels	1280 x 800 pixels	1920 x 1200 pixels	1280 x 800 pixels
	Brightness	400 nits	450 nits	400 nits	450 nits	400 nits
	Lifetime	30,000 hours	30,000 hours	30,000 hours	30,000 hours	30,000 hours
Touch		P-CAP OCA direct bonding with LCD Panel, AF (Anti-Fingerprint)	P-CAP OCA direct bonding with LCD Panel, AF (Anti-Fingerprint)	P-CAP	P-CAP OCA direct bonding with LCD Panel, AF (Anti-Fingerprint)	P-CAP
O.S. Support		Windows 10 IoT LTSC 2016 64 bit	Windows 10 IoT LTSC 2019 64 bit Windows 10 IoT LTSC 2016 64 bit	Windows 10 IoT LTSC 2016 32 bit	Android 9.0	Android 5.1.1
CPU Support		Intel® Atom™ x5-Z8550 Quad Core™	Intel® Atom™ x5-Z8550 Quad Core™	Intel® Atom™ Z3735F Quad Core™	Qualcomn S450 octacore 64-bit processor	ARM Cortex A9 Quad Core™
CPU Speed		1.44 GHz up to 2.4 GHz	1.44 GHz up to 2.4 GHz	1.33 GHz up to 1.83 GHz	1.8 GHz	1.33 GHz
Chipset / Graphics		Built-in CPU	Built-in CPU	Built-in CPU	Built-in CPU	Built-in CPU
Memory		2GB / 4GB LPDDR3	2GB / 4GB / 8GB LPDDR3	2GB DDR3L	2GB LPDDR3 + 16GB eMMC 4GB LPDDR3 + 32GB eMMC	1GB / 2GB DDR3L
Storage		32GB / 64GB eMMC	32GB / 64GB eMMC	32GB / 64GB eMMC		16GB / 32GB / 64GB eMMC
Speaker		1W x 1	1W x 1	1W x 1	1W x 1	1W x 1
WiFi + BT		802.11 b/g/n + BT 4.0	802.11 ac/a/b/g/n + BT 4.1	802.11 b/g/n + BT 4.0	802.11 ac/a/b/g/n BT2.1+EDR/ 3.0/ 4.2LE	802.11 b/g/n + BT 4.0
Battery Capacity		3.8V/7400mAh hours / 28.1 Wh	3.6V/7900mAh hours / 28.4 Wh	3.6V/7900mAh hours / 28.4 Wh	3.8V/7400mAh hours / 28.1 Wh	3.6V/7900mAh hours / 28.4 Wh
Battery Operation		Up to 8 hours	Up to 8 hours	Up to 8 hours	Up to 8 hours	Up to 8 hours
BIOS		Insyde	Insyde	Insyde	—	—
G-Sensor		1	1	1	1	1
Ambient Light Sensor		1	1	—	1	—
I / O P O R T S	USB	USB Type C x 1	USB 3.0 Type A x 1	USB 2.0 Type A x 1	USB Type C x 1	USB 2.0 Type A x 1
	DC Jack	DC 5V	DC 12V / 24V	DC 12V	DC 12V~24V	DC 12V
	Phone Jack	—	1	1	1	1
	SD	1 (internal)	1 (internal)	1 (internal)	1 (internal)	1 (internal)
	SIM	1 (internal)	1 (internal)	1 (internal)	1 (internal)	1 (internal)
	Cradle Connector	POGO pin x 1	POGO pin x 1	POGO pin x 1	POGO pin x 1	POGO pin x 1
	HDMI	—	—	—	—	—
O P T I O N A L D E V I C E	Barcode Scanner	2D Barcode	2D Barcode	2D Barcode	2D Barcode	2D Barcode
	Camera	Rear 8M pixels	Front / Rear 5M pixels	Rear 5M pixels	8MP Front FF camera 8MP Rear AF camera	Rear 5M pixels
	NFC	1	1	1	1	1
	MSR	1	1	1	1	1
	Smart Card Reader	1	1	1	1	1
	3G / 4G	4G module	4G module	—	4G module	3G on board
	Vibrator	1	—	—	—	—
	GPS	GPS module	GPS module	—	GPS, GLONASS, BeiDou	—
	Fingerprint	—	1	—	—	—
	Lite Cradle	1	1	1	1	1
A C C E S S O R I E S	Battery Charger	2 bay/4 bay	2 bay/4 bay	2 bay/4 bay	—	2 bay/4 bay
	AIO POS Cradle	—	—	—	—	—
	Hand Strap	1	1	1	1	1
	Neck Strap	—	1	1	1	1
	IP Rating	IP54 (front Panel)	IP54 (front Panel)	IP54 (front Panel)	IP54 (front Panel)	IP54 (front Panel)
Power Adaptor		Pad with 5V/3A/15W Cradle with 12V/5A/60W	Pad with 12V/2A/24W 24V/1A/24W Cradle with 12V/5A/60W	Pad with 12V/2A/24W Cradle with 12V/5A/60W	Pad with 12V/2A/24W	Pad with 12V/2A/24W Cradle with 12V/5A/60W
Dimensions (W x H x D) mm		120.6 x 192.6 x (21 - 25.3)	267.84 x 188.5 x 25.2	267.84 x 188.5 x 25.2	257 x 169 x 17	267.84 x 188.5 x 25.2
Weight (approx)		499 g (Pad only)	838 g (Pad only)	838 g (Pad only)	700 g (Pad only)	838 g (Pad only)
Certifications		CE, FCC	CE, FCC, TELEC	CE, FCC	CE, FCC	CE, FCC

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Peripheral



Peripheral Selection Guide



Model		PA-V560	MP-4815	MP-4815	MP-4815	MP-4003
Application		Stand	Customer Display	Stand-alone Display	Wall-mounted Display	VFD Customer Display
QR Code						
Pictures						
D I S P L A Y	Sizes	—	15"	15"	15"	20 columns x 2 lines
	Resolution	—	1024 x 768 pixels	1024 x 768 pixels	1024 x 768 pixels	20 columns x 2 lines by 5 x 7 font
	Brightness	—	300 nits	300 nits	300 nits	—
	Lifetime	—	50,000 hours	50,000 hours	50,000 hours	—
	Viewing Angle	—	Horizontal: 88°, Vertical: 88°	Horizontal: 88°, Vertical: 88°	Horizontal: 88°, Vertical: 88°	Horizontal: 125°, Vertical: 45°
	Touch	—	Resistive touch & P-CAP touch	Resistive touch & P-CAP touch	Resistive touch & P-CAP touch	—
OSD		—	Power button x1, Auto x 1, Menu+ x 1, Menu- x 1	Power button x1, Auto x 1, Menu+ x 1, Menu- x 1	Power button x1, Auto x 1, Menu+ x 1, Menu- x 1	—
I / O P O R T S	VGA	—	1	1	1	—
	DVI	—	DVI-I cable (support DVI-D signal only)	DVI-I cable (support DVI-D signal only)	DVI-I cable (support DVI-D signal only)	—
	USB	—	Type B x 1	Type B x 1	Type B x 1	—
	COM	—	—	—	—	RS232 with cable x 1
	HDMI	—	—	—	—	—
	LAN	—	—	—	—	—
	Cash Drawer	—	—	—	—	—
	Line In	—	—	—	1	—
	Line Out	—	—	—	—	—
	DC In Jack	—	DC12V x 1	DC12V x 1	DC12V x 1	DC12V with cable x1
O P T I O N A L D E V I C E	Barcode Scanner	1	1	1	1	—
	Camera	—	Front 5M pixels x 1	Front 5M pixels x 1	Front 5M pixels x 1	—
	MSR	—	1	1	1	—
	RFID	1	1	1	1	—
	Fingerprint	—	1	1	1	—
	Smart Card	—	—	—	—	—
	NFC	—	—	—	—	—
Speaker		—	—	—	2W x 2	—
2nd Display Hinge Module		Support 8", 10", 15" 2nd display	Different 2nd display hinge module for POS (PA-6322, PA-6722, PA-6980, PA-6225, PA-5822 & PA-5880)	—	—	—
Stand-alone Stand		Yes	—	Yes	—	—
Wall-mounted Kit		—	—	—	Yes	—
Language		—	English, French, Deutsch, Italiano, Spanish, Japanese, Chinese (Traditional)...etc.	English, French, Deutsch, Italiano, Spanish, Japanese, Chinese (Traditional)...etc.	English, French, Deutsch, Italiano, Spanish, Japanese, Chinese (Traditional)...etc.	US English, French, German, Swedish, Danish, Spanish, Norwegian, Russian, Japanese (Katakana)... etc.
OPOS Driver		—	—	—	—	Yes
IP Rating		—	IP54 (front panel)	IP54 (front panel)	IP54 (front panel)	—
Power Adaptor		—	12V/3.3A/40W	12V/3.3A/40W	12V/3.3A/40W	12V/1A/12W
Dimensions (W x H x D) mm		Stand only: 200 x 351.7 x 241	Panel only: 367 x 37.8 x 299.3	Panel only: 367 x 37.8 x 299.3	Panel only: 367 x 37.8 x 299.3	Panel only: 217.3 x 63.4 x 44.6
Operation Temp.		0°C~40°C	0°C~40°C	0°C~40°C	0°C~40°C	-40°C~80°C
Certifications		—	CE, FCC	CE, FCC	CE, FCC	CE

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

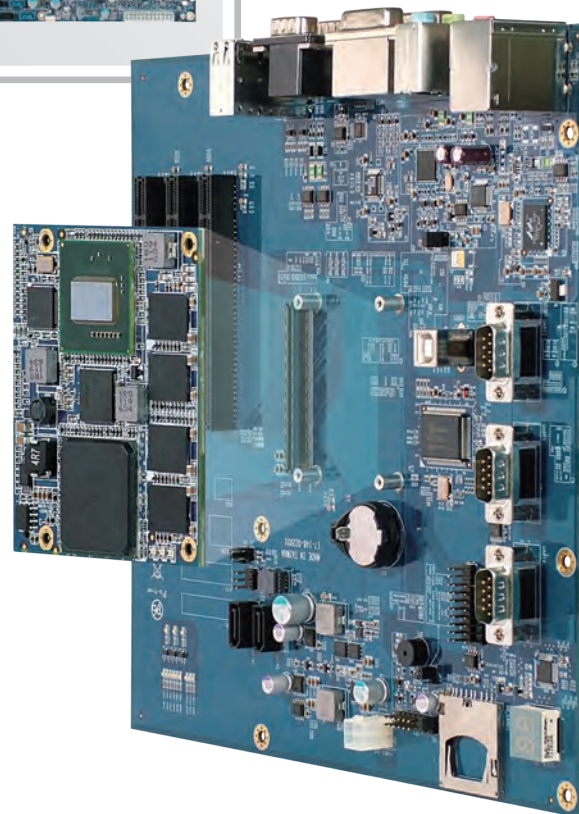
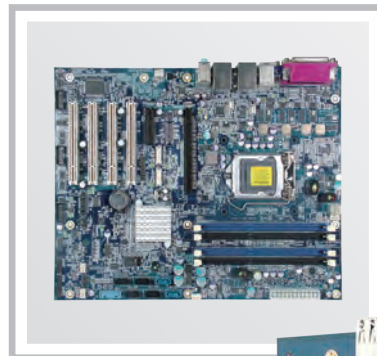
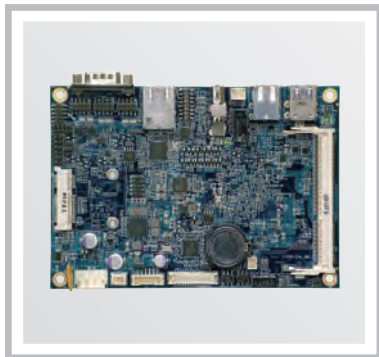
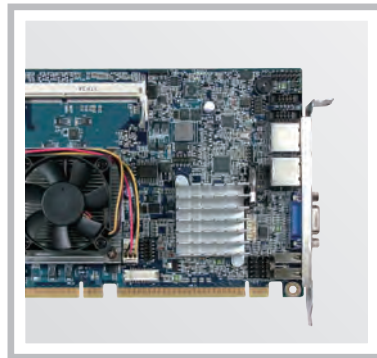
Peripheral Selection Guide



Model		MP-1150	MP-1060
Application		Mobile Thermal Printer	Stand-alone Thermal Printer
QR Code			
Pictures			
Paper Width		58 mm (2")	80 mm (3") or 58 mm (2")
Interface		Bluetooth (Ver. 4.0)/USB	Combo with USB/Serial
Print Speed		Up to 100 mm/sec	Up to 200 mm/sec
Cutter Type		Tear bar	Auto cut
Printing Head Endurance		50 km	100 km
Cutter Endurance		1.5 million cuts	1.5 million cuts
Buffer		4KB	4KB
SRAM		128KB	128KB
Paper Roll Diameter		Up to 38 mm	Up to 80 mm
Flash		2MB	2MB
SOFTWARE	Emulation	ESC/POS CMD compatible	ESC/POS CMD compatible
	Driver	Windows10/x86 Windows8/x86 Windows7 x86/x64 WindowsXP x86 OPOS/JPOS	Windows10/x86 Windows8/x86 Windows7 x86/x64 WindowsXP x86 OPOS/JPOS
LANGUAGE	Character	Traditional Chinese, Simple Chinese, Japanese, Korean	Traditional Chinese, Simple Chinese, Japanese, Korean
	Code Page	CP-437, Katakana character set, CP-850, CP-852, CP-860, CP-863, CP-865, CP-1252	CP-437, Katakana character set, CP-850, CP-852, CP-860, CP-863, CP-865, CP-1252
1D / 2D Barcode Support		Yes	Yes
Power Supply		12V/2A	24V/2.5A
Battery Pack		7.4V/2900mA/21.4Wh	--
ENVIRONMENT	Operating Temp.	-10°C~50°C	-10°C~50°C
	Storage Temp.	-30°C~70°C	-30°C~70°C
	Operating Humidity	30%~80% RH (non-condensing)	30%~80% RH (non-condensing)
	Storage Humidity	5%~90% RH (expect for paper)	5%~90% RH (expect for paper)
	Operating Temp.	-10°C~50°C	-10°C~50°C
Weight		250 g (w/o battery & roll paper)	1.6 kg
Detect Sensor		Paper end, cover open	Paper end and near end sensor
Dimensions (W x H x D)		142 x 127 x 154 mm	140 x 146 x 123 mm
Certifications		CE, FCC	CE, FCC

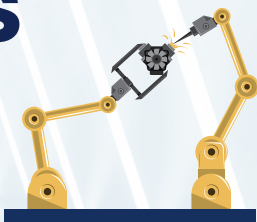
*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Industrial CPU Board



Industrial Motherboards

Selection Guide



Model		BA-2602	BA-2601	BA-2501	BA-0951	BU-2509	BK-0940	BM-0982
QR CODE								
Pictures								
Form Factor		ATX	ATX	ATX	ATX	Micro ATX	Flex ATX	Mini-ITX
CPU Support		8th Gen. Core™ / Pentium® / Celeron® / Xeon® E-2200/2100 CPU	8th Gen. Core™ / Pentium® / Celeron® / Xeon® E-2100 CPU	7th / 6th Gen. Core™ / Pentium® / Celeron® / Xeon® E3-1200 v5/v6	4th Gen. Core™ / Pentium® / Xeon® E3-1200 v3	7th / 6th Gen. Core™ / Pentium® / Celeron® / Xeon® E3-1200 v5/v6	4th Gen. Core™ / Pentium®	N4200: 1.1GHz N3350: 1.1GHz J3455: 1.5GHz
CPU Socket		LGA1151	LGA1151	LGA1151	LGA1150	LGA1151	LGA1150	onboard
CPU List		E-2278GE(GEL) E-2276GE E-2176G E2124G i7-9700E(TE)/8700(T) i5-9500E(TE)/8500(T) i3-9100E(TE)/8100(T) G5400(T) G4900(T)	E-2176G E-2124G i7-8700(T) i7-8500(T) i3-8100(T) G5400(T) G4900(T)	E3-1275 v6/v5 E3-1225 v5 E3-1268L v5 i7-7700(T)/6700(TE) i5-7500(T)/6500(TE) i3-7101E/6100(TE) G4400(TE) G3930E/TE G3900(TE)	E3-1275 v3 E3-1268L v3 E3-1225 v3 i7-4770S i5-4570S i3-4340TE G3420	E3-1275 v6/v5 E3-1225 v5 E3-1268L v5 i7-7700(T)/6700(TE) i5-7500(T)/6500(TE) i3-7101E/6100(TE) G4400(TE) G3930E/TE G3900(TE)	i7-4770S/TE i5-4590S/T i5-4570S/TE i3-4360 i3-4350T i3-4340TE i3-4330(TE) G3420 G3320TE	N4200: 1.1GHz N3350: 1.1GHz J3455: 1.5GHz
Chipset		Intel® Q370 / Intel® C246	Intel® H310 / Intel® Q370 / Intel® C246	Intel® H110 / Intel® Q170 / Intel® C236	Intel® C226	Intel® H110 / Intel® Q170 / Intel® C236	Intel® H81 / Intel® Q87	—
Max. System Memory		64GB	64GB	64GB	32GB	64GB	32GB	8GB
Display		1 x VGA 2 x DP 1 x eDP	1 x VGA 1 x DVI-D 1 x eDP	1 x VGA 1 x DVI-D 1 x eDP	1 x VGA 3 x DP (internal)	1 x VGA 1 x DVI-D 1 x DP (internal)	1 x VGA 1 x DVI-D 1 x DP (internal)	1 x VGA 1 x DP/HDMI 1 x LVDS
Audio		Line In Line Out Mic In	Line In Line Out Mic In	Line In Line Out Mic In	Line In Line Out Mic In	Line In Line Out Mic In	Line In Line Out Mic In	Line In Line Out Mic In
I/O PORTS	SATA Interface	6 x SATA 3.0	6 x SATA 3.0	6 x SATA 3.0	6 x SATA 3.0	6 x SATA 3.0	1 x SATA 3.0 1 x SATA 2.0	2 x SATA 3.0
	FDD Interface	--	—	--	—	—	—	—
	Serial Ports	6	6	6	6	6	10	6
	Parallel Port	1	1	--	—	—	—	0
	LAN	Dual (1G)	Dual (1G)	Dual (1G)	Dual (1G)	Dual (1G)	Dual (1G)	Dual (1G)
	USB	4 x USB 3.1 2 x USB 3.0 6 x USB 2.0	4 x USB 3.1 2 x USB 3.0 4 x USB 2.0	6 x USB 3.0 4 x USB 2.0	4 x USB 3.0 8 x USB 2.0	6 x USB 3.0 4 x USB 2.0	4 x USB 3.0 8 x USB 2.0	4 x USB 3.0 2 x USB 2.0
	PS/2	1	2	2	1	2	2	2
Expansion Bus		1 x PCIe (x16) 3 x PCIe (x4) 1 x PCIe (x1) 2 x PCI 1 x mini PCIe	1 x PCIe (x16) 1 x PCIe (x4) 5 x PCI 1 x mini PCIe	1 x PCIe (x16) 1 x PCIe (x4) 5 x PCI 1 x mini PCIe	2 x PCIe (x8) 4 x PCIe (x1) 1 x mini PCIe	1 x PCIe (x16) 2 x PCIe (x4) 1 x PCIe (x1) 1 x mini PCIe	1 x PCIe (x16) 1 x PCIe (x4) 1 x PCI	1 x PCIe (x1) 1 x mini PCIe 1 x M.2 (2242)
Power Requirement		ATX Power	ATX Power	ATX Power	ATX Power	ATX Power	ATX Power	DC 12~24V
Certifications		CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Industrial Motherboards

Selection Guide

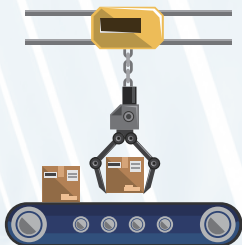


Model		BM-2505	BM-2503	BM-2502	BM-0972	BM-0962	BM-0947	BM-0942
QR CODE								
Pictures								
Form Factor		Mini-ITX	Mini-ITX	Mini-ITX	Thin Mini-ITX	Mini-ITX	Mini-ITX	Mini-ITX
CPU Support		7th / 6th Gen. Core™ / Pentium® / Celeron®	7th / 6th Gen. Core™ / Pentium® / Celeron®	7th / 6th Gen. Core™ / Pentium® / Celeron®	N3710: 1.6GHz N3060: 1.6GHz	J1900: 2GHz N2930: 1.83GHz N2807: 1.58GHz E3827: 1.75GHz E3815: 1.46GHz	4th Gen. Core™ / Pentium®	4th Gen. Core™ / Pentium®
CPU Socket		LGA1151	LGA1151	LGA1151	onboard	onboard	LGA1150	LGA1150
CPU List		i7-7700(T) i7-6700(TE) i5-7500(T) i5-6500(TE) i3-7101E/TE i3-6100(TE) G4400(TE) G3930E/TE G3900(TE)	i7-7700(T) i7-6700(TE) i5-7500(T) i5-6500(TE) i3-7101E/TE i3-6100(TE) G4400(TE) G3930E/TE G3900(TE)	i7-7700(T) i7-6700(TE) i5-7500(T) i5-6500(TE) i3-7101E/TE i3-6100(TE) G4400(TE) G3930E/TE G3900(TE)	N3710: 1.6GHz N3060: 1.6GHz	J1900: 2GHz N2930: 1.83GHz N2807: 1.58GHz E3827: 1.75GHz E3815: 1.46GHz	i7-4770S/TE i5-4590S/T i5-4570S/TE i3-4360 i3-4350T i3-4340TE i3-4330(TE) G3420 G3320TE	i7-4770S/TE i5-4590S/T i5-4570S/TE i3-4360 i3-4350T i3-4340TE i3-4330(TE) G3420 G3320TE
Chipset		Intel® H110/ Intel® Q170	Intel® H110/ Intel® Q170	Intel® H110/ Intel® Q170	--	—	Intel® H81	Intel® H81/ Intel® Q87
Max. System Memory		32GB	32GB	32GB	8GB	8GB	16GB	16GB
Display		2 x DVI-D 1 x DP (internal)	1 x VGA 1 x DP 1 x LVDS	2 x DVI-D 1 x DP (internal)	1 x VGA 1 x DP 1 x LVDS	1x DVI-I 1 x LVDS	1 x VGA 1 x LVDS	1 x DVI-I 1 x DVI-D 1 x DP (internal)
Audio		Line In Line Out Mic In	Line In Line Out Mic In	Line In Line Out Mic In	Line In Mic In	Line In Line Out Mic In	Line In Line Out Mic In	Line In Line Out Mic In
I/O Ports	SATA Interface	2 x SATA 3.0	2 x SATA 3.0	2 x SATA 3.0	1 x SATA 3.0 1 x mSATA	2 x SATA 2.0	2 x SATA 3.0 1 x SATA 2.0	2 x SATA 3.0 1 x SATA 2.0
	FDD Interface	—	—	—	--	—	--	—
	Serial Ports	6	2	6	6	4	6	4
	Parallel Port	1	1	1	--	—	--	—
	LAN	Dual (1G)	Dual (1G)	Dual (1G)	Dual (1G)	Dual (1G)	Single (1G)	Dual (1G)
	USB	4 x USB 3.0 4 x USB 2.0	4 x USB 3.0 4 x USB 2.0	4 x USB 3.0 5 x USB 2.0	4 x USB 3.0 3 x USB 2.0	1 x USB 3.0 5 x USB 2.0	2 x USB 3.0 6 x USB 2.0	2 x USB 3.0 6 x USB 2.0
	PS/2	1	—	—	--	2	2	2
	IrDA	—	—	—	--	—	--	—
Expansion Bus		1 x PCIe (x16) 1 x mini PCIe	1 x PCIe (x16) 1 x M.2 (2242)	1 x PCIe (x16) 1 x mini PCIe	1 x PCIe (x1) 1 x mini PCIe	1 x PCIe (x1) 1 x mini PCIe	1 x PCIe (x16)	1 x PCIe (x16)
Power Requirement		ATX Power	DC 12V	ATX Power	DC 12V	DC 12V	ATX Power	ATX Power
Certifications		CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Embedded Boards

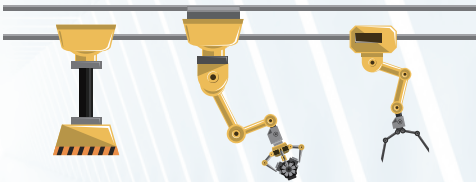
Selection Guide

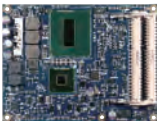


Model		BE-0996	BE-0986	BE-0981	BE-0966	BE-0961
QR Code						
Pictures						
Form Factor		3.5"	3.5"	3.5"	3.5"	3.5"
CPU Support		Core i5-7300U, 2.6GHz Core i3-7100U, 2.4GHz Pentium 4415U, 2.3GHz	Celeron J3455, 1.5GHz Atom E3940, 1.6GHz	Celeron N3350, 2.4GHz Pentium N4200, 2.5GHz	E3815: 1.46GHz E3825: 1.33GHz E3845: 1.91GHz N2930: 2.16GHz	E3815: 1.46GHz E3825: 1.33GHz N2807: 2.16GHz N2930: 2.16GHz
Chipset		—	--	--	—	--
Max. System Memory		DDR4, 16GB	DDR3L, 8GB	DDR3L, 8GB	DDR3L, 4GB	DDR3L, 4GB
BIOS		AMI	AMI	AMI	AMI	AMI
Watchdog Timer		1~255 secs	1~255 secs	1~255 secs	1~255 secs	1~255 secs
Display		1 x HDMI 1 x DP 1 x LVDS	1 x VGA 1 x HDMI 1 x LVDS	1 x VGA 1 x DP 1 x LVDS	1 x VGA (pin header) 1 x DP 1 x LVDS	1 x VGA 1 x LVDS
Audio		Line In / Line Out / Mic In (pin header)	HD Line Out / Line In / Mic In	HD Line Out / Line In / Mic In	HD Line Out / Line In / Mic In	HD Line Out / Line In / Mic In
I/O PORTS	Serial Ports	2	4	4	4	4
	Parallel Port	—	--	--	—	--
	LAN	Dual (1G)	Dual (1G)	Dual (1G)	Single (1G)	Dual (1G)
	USB	2 x USB 3.0 6 x USB 2.0	4 x USB 3.0 2 x USB 2.0	4 x USB 3.0 2 x USB 2.0	2 x USB 3.0 4 x USB 2.0	1 x USB 3.0 2 x USB 2.0
	SATA Interface	1	1	1	1	SKU A: 1 x SATA SKU B: 0 x SATA
CF/CFast/SD		—	--	--	—	1 x CFast
Expansion Bus		1x full-sized mSATA slot 1x full-sized mPCIe slot 1 x I ² C	1 x full-sized mPCIe 1 x full-sized mSATA 1 x I ² C	1 x full-sized mPCIe 1 x full-sized mSATA 1 x I ² C	1 x half-sized mPCIe	SKU A: 1 x half-sized mPCIe SKU B: 1 x half-sized mSATA
FAN conn		1 x 4 pin FAN conn	1 x 4 pin FAN conn	1 x 4 pin FAN conn	1 x 3 pin FAN conn	1 x 3 pin FAN conn
Power Requirement		DC In 12V, 24V	DC In 12V & 19V, 24V	DC In 12V	DC In 12V	DC In 12V
Certifications		CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

COM Express Selection Guide

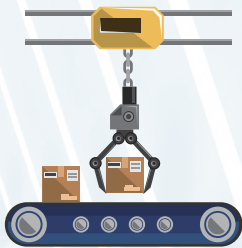


Model		COE-592LF	CMB-220LF	BC-0928	BC-0230
QR Code					
Pictures					
Form Factor		Core Express	Micro-ATX	COM Express Type 6 Basic	ATX
CPU Support		Atom™ E680 / E680T / E640	From CPU module	Core™ i7 / i5 / i3 processors	From CPU module
CPU Speed		E680 / 680T: 1.6GHz E640: 1GHz	From CPU module	i7-4700EQ-2.4GHz (Turbo 3.4GHz) i5-4400E-2.7GHz (Turbo 3.3GHz) i3-4102E-1.6GHz (no Turbo)	From CPU module
Chipset		Intel® EG20T	From CPU module	QM87	From CPU module
Max. System Memory		Up to 2GB	From CPU module	16GB	From CPU module
Cache		Built-in CPU	From CPU module	Built-in CPU	From CPU module
BIOS		AMI	From CPU module	AMI	From CPU module
Watchdog Timer		1~255 secs	1~255 secs	1~255 secs	1~255 secs
CMOS		Built-in PCH	From CPU module	Built-in PCH	Built-in PCH
Audio		Support HD codec on carrier board	HD codec	Support HD codec on carrier board	HD codec
I/O Ports	SATA Interface	2	2	2	2
	IDE Interface	—	—	—	--
	FDD Interface	—	—	—	--
	Serial Ports	3	4	2	4
	Parallel Port	—	—	—	--
	VGA	—	—	Yes	Yes
	LAN (Mbps)	Single (1G)	Single (1G)	Single (1G)	Single (1G)
	USB	7 x USB 2.0	7 x USB 2.0	4 x USB 3.0 8 x USB 2.0	4 x USB 3.0 2 x USB 2.0
	IrDA	—	—	—	--
Solid State Disk		SD	SD	—	--
Expansion Bus		PCIe (x1)	PCIe (x1)	1 x PCIe (x16) 7 x PCIe (x1)	1 x PCIe (x16) 5 x PCIe (x1) 1 x express card 1 x mini PCIe 1 x SMBus 1 x I²C 1 x LPC 1 x post LED debug code
Power Supply		AT/ATX	ATX	ATX	ATX
Power Requirement		+5V, +5Vsb	+12V	+5V, +12V	+5V, +12V
Certifications		CE, FCC	CE, FCC	CE, FCC	CE, FCC

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Full Size Cards

Selection Guide

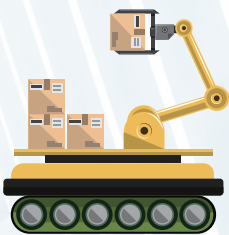


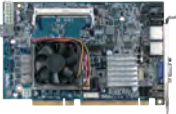
Model		BF-0903	BF-0893
QR Code			
Pictures			
Form Factor		PICMG 1.3 Full Size SBC	PICMG 1.3 Full Size SBC
CPU Support		Intel® E3-V2 / 3rd / 2nd Gen. Core™ i3 CPU	Intel® 3rd / 2nd Gen. Core™ i7 / i5 / i3 / Pentium® CPU
CPU Socket		LGA1155	LGA1155
CPU List		E3-1275V2: 3.5GHz E3-1225V2: 3.2GHz i3-3220: 3.3GHz	i7-3770: 3.4GHz i5-3550S: 3.0GHz i3-3220: 3.3GHz Pentium® G2120: 3.1GHz
Chipset		Intel® C216	Intel® Q77
Memory Support		32GB (non ECC, ECC)	32GB (non ECC)
BIOS		AMI	AMI
Display		1 x VGA 2 x DP (internal)	1 x VGA 2 x DP (internal)
Audio		Mic In / Line In / Line Out	Mic In / Line In / Line Out
I / O P O R T S	Serial Ports	2	2
	Parallel Port	1	1
	LAN	Dual (1G)	Dual (1G)
	USB (onboard)	2 x USB 3.0 6 x USB 2.0	2 x USB 3.0 6 x USB 2.0
	SATA (onboard)	2 x SATA 3.0 2 x SATA 2.0 RAID 0/1/5/10/01	3 x SATA 2.0 1 x SATA 3.0
	FDD/CF/CFast/SD	—	--
Expansion Bus		1 x mini PCIe	1 x mini PCIe
Golden Finger		1 x PCIe (x16) 1 x PCIe (x4) 2 x SATA 2.0 4 x USB 2.0	1 x PCIe (x16) 1 x PCIe (x4) 2 x SATA 2.0 4 x USB 2.0
Power Requirement		ATX (from golden finger)	ATX (from golden finger)
Certifications		CE, FCC	CE, FCC

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Half Size Cards

Selection Guide



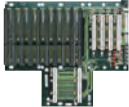
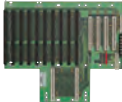
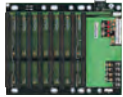
Model		BH-0927	BH-1105
QR Code			
Pictures			
Form Factor		PICMG 1.3 Half Size SBC	ISA Half Size SBC
CPU Support		Intel® 4th Gen. mobile onboard CPU i7-4700EQ: 4C, 3.4GHz i5-4400E: 2C, 3.3GHz i3-4102E: 2C, 1.6GHz Celeron 2202E: 2C, 1.6GHz	AMD G-series onboard CPU G-T16R: 1C, 615MHz G-T52R: 1C, 1.5GHz
Chipset		Intel® QM87 / HM86	AMD A55E
Max. System Memory		16GB	4GB
BIOS		AMI	AMI
Display		1 x VGA 1 x DP (internal)	1 x VGA 1 x LVDS
Audio		HD Audio signal	HD Audio
I/O Ports	Serial Ports	2	2
	Parallel Port	—	1
	LAN	Dual (1G)	Single (1G)
	USB	6 x USB 2.0 2 x USB 3.0	2 x USB 2.0
	SATA Interface	2	2
	FDD/CF/CFast/SD	1 x Cfast	1 x FDD 1 x Cfast
	IrDA	—	1
Expansion Bus		—	PC/ 104 slot
Power Requirement		ATX	AT/ ATX (+5V, +12V)
Certifications		CE, FCC	CE, FCC

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Backplane

Selection Guide

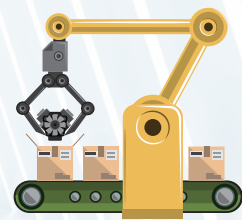


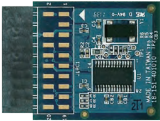
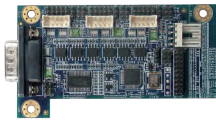
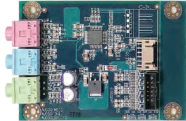
Model	BR-G14D	BR-I14A	BR-I14C	BR-I14D	BR-C03P	BR-C04C	BR-C05P	BR-I04A	BR-I08A
QR Code									
Pictures									
PICMG 1.3	1	0	0	0	0	0	0	0	0
PICMG 1.0	0	1	1	1	0	0	0	0	0
PCI	8	4	4	13	3	4	5	0	0
ISA	0	9	9	1	0	0	0	4	8
PCIe (x16)	1	0	0	0	0	0	0	0	0
PCIe (x4)	0	0	0	0	0	0	0	0	0
PCIe (x1)	3	0	0	0	0	0	0	0	0

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Daughter Boards

Selection Guide



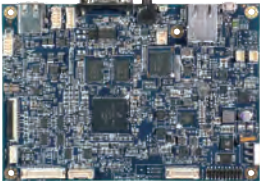
Model	BR-8080	BR-8010	BR-4010	BR-6061	BR-3010
QR Code					
Pictures					
Function	Display	Display	TPM module	I/O Expansion	I/O Expansion
Input I/F	DP/eDP	SDVO	LPC	LPC	HD Audio
Output I/F	LVDS	VGA	n/a	4 x COM	Mic In Line In Line Out
Dimensions	50 x 80 mm	81.8 x 50.8 mm	31.3 x 29.7 mm	50 x 89 mm	56 x 80 mm

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

RISC Embedded Board

Selection Guide



Model		MB-0051
QR Code		
Pictures		
Processor		Freescall™ i.MX515
Core		800MHz ARM Cortex-A8
Storage		onboard eMMC 4GB
Memory		onboard DDR2 SDRAM (up to 512MB)
O.S. Support		Windows CE 6.0
Display Support		1 x TTL 1 x LVDS
Audio		1 x Line Out 1 x Mic In 2CH Audio AMP
I/O PORTS	SD/CFast	1 x SD slot
	Digital I/O	3 in / 3 out
	Serial Ports	2
	USB	1 x USB 2.0 OTG 4 x USB 2.0 Host
	LAN	Single (10/100 Mbps)
	Touch	Supports a 4-wire resistive touchscreen
	Keypad	8 Row x 6 Column
Expansion Slot		N/A
Power Requirement		DC In 12V (3 pin)
Dimensions		145 x 102 mm

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Wall & Rack Mount System



Wall & Rack Mount System

Selection Guide



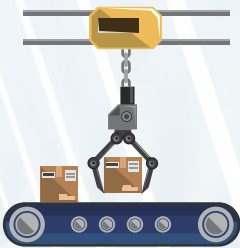
Model		BS-2602	BS-0981	BS-W025
QR Code				
Pictures				
Mounting Type		4U Rack-mounted	1U Rack mount	Wall mount
Dimensions (W x H x D) mm		430 x 177 x 330	482 x 45 x 250	277 x 136 x 316
CPU Support		Intel® 9th / 8th Xeon® / Core™ / Pentium® / Celeron® CPU (socket: LGA1151)(≤ 65W)	Intel® Celeron N3350: 2C, 2.4GHz	Intel® 7th / 6th Core™ / Pentium® / Celeron® CPU (socket: LGA1151)
Chipset		Intel® Q370 / H310 / C246	—	Intel® Q170 / H110 / C236
Max. System Memory		64GB	16GB	32GB
Drive Bay		3.5" x 4 (SATA 3.0) 2.5" x 2 (optional)	1 x 2.5" SSD/HDD (SATA 3.0)	2 x 2.5" SSD/HDD (SATA 3.0)
Display		VGA 2 x DP	1 x DP	1 x VGA 1 x DVI-D
Audio		Mic In / Line In / Line Out	Line Out	Mic In / Line In / Line Out
I / O P O R T S	Serial Ports	6	4	2
	Parallel Port	1	—	—
	LAN	Dual (1G)	2	Dual (1G)
	USB	2 x USB 3.1 4 x USB 3.0 6 x USB 2.0	6	2 x USB 2.0 4 x USB 3.0
Expansion Slots		1 x PCIe (x16) 3 x PCIe (x4) 1 x PCIe (x1) 2 x PCI 1 x mini PCIe 1 x M.2	1 x mSATA 1 x PCIe (x1)	1 x PCIe (x16) 2 x PCIe (x4) 1 x PCIe (x1)
Power Requirement		ATX	DC In 12V	DC In 24V (2 pin)
O.S. Support		Windows 10	Windows 10 / Windows 7	Windows 10 / Windows 7
Certifications		CE, FCC	CE, FCC	CE, FCC

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Applied Computer



Applied Computer Selection Guide

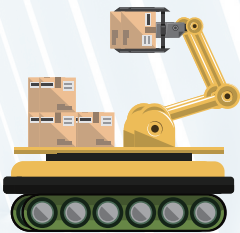


Embedded PC								
Model	SE-N207	SE-8400	SE-8134	SE-8300	BS-E099	BS-E098	BS-E097	SE-8124
QR Code								
Pictures								
Processor	Intel® i7-8665UE 1.80GHz i5-8365UE 1.60GHz i3-8145UE 2.10GHz Celeron® 4305U	Intel® i7-6700TE 2.4GHz i5-6500TE 2.3GHz i3-6100TE 2.7GHz Pentium® G4400TE Celeron® G3900TE	Intel® N3350: 2C, 2.4GHz N4200: 4C, 2.5GHz J3455: 4C, 2.3GHz E3950: 4C, 1.8GHz	Intel® E3845 1.91GHz	Intel® Core i5-7300U 2.6GHz i3-7100U 2.4GHz Pentium® 4415U 2.3GHz	Intel® N3350: 2C, 2.4GHz N4200: 4C, 2.5GHz	Intel® E3940: 4C, 1.8GHz J3455: 4C, 2.3GHz	Intel® E3845 1.91GHz E3826 1.46GHz J1900 2.0GHz
Chipset	—	Intel® Q170/H110	—	—	—	—	—	—
Max. System Memory	32GB DDR4	32GB DDR4	8GB DDR3L	8GB DDR3L	16GB DDR4	8GB DDR3L	8GB DDR3L	8GB DDR3L
I/O PORTS	Display	1 x HDMI 2 x HDMI/DP (option)	1 x DVI-I 1 x HDMI	1 x DVI-D 1 x VGA	1 x DP 1 x HDMI	1 x VGA 1 x DP	1 x VGA 1 x HDMI	1 x DVI-I 1 x DVI-D
	USB	4 x USB 3.0 + 6 x USB 2.0 (option)	6 x USB 3.0 (Q170) 4 x USB 3.0 + 2 x USB 2.0 (H110)	4 x USB 3.0	3 x USB 2.0 1 x USB 3.0	4 x USB 3.0 2 x USB 2.0	4 x USB 3.0 2 x USB 2.0	3 x USB 2.0 1 x USB 3.0
	Audio Line In / Line Out / Mic In	1 / 1 / 1	1 / 1 / 1	0 / 1 / 1	0 / 1 / 1	0 / 1 / 0	1 / 0 / 0	0 / 1 / 1
	LAN	2 or 4 x GbE with PoE as option or 6 x GbE (option)	2 x GbE with PoE as option	2 x GbE with PoE as option	2 x GbE + 8 x PoE	2 x GbE	2 x GbE	2 x GbE with PoE as option
	Serial Ports	2 or 4 or 6 (option)	4 + 2 (option)	4	4	2 + 2 (option)	4	4
	Parallel Port	1 (option)	1 (option)	—	—	—	—	—
	Digital I/O Port	8in / 8out	8in / 8out	4in / 4out	4in / 4out	8in / 8out	8	4in / 4out
	CAN Bus	2 (option)	—	—	1	—	—	—
	SIM Card	—	1	2	2	—	—	1
	SD Card	1	—	1	—	—	—	1
	DC Out	12V / 5V (1A)	12V / 5V (1A)	—	12V (4A)	—	—	—
Expansion Slots	1 x M.2 slot (2242-E) PCIe/USB 2.0 support 1 x full-sized mPCIe (USB 2.0/PCIe)	1 x full-sized mPCIe (USB 2.0/PCIe/external SIM card) 1 x half-sized mPCIe (USB 2.0/PCIe)	1 x full-sized mPCIe (USB 2.0/PCIe/external SIM card) 1 x full-sized mSATA (SATA/USB 2.0/external SIM card)	1 x full-sized mPCIe (USB 2.0/PCIe/external SIM card) 1 x half-sized mPCIe (USB 2.0/PCIe)	1 x full-sized mPCIe (USB/PCIe) 1 x full-sized mSATA (SATA/USB)	1 x full-sized mPCIe (USB/PCIe) 1 x full-sized mSATA (SATA/USB)	1 x full-sized mPCIe (USB/PCIe) 1 x full-sized mSATA (SATA/USB)	1 x full-sized mPCIe (USB 2.0/PCIe/external SIM card) 1 x half-sized mPCIe (USB 2.0/PCIe)
Drive Bays	1 x 2.5" SATAIII HDD/SSD 1 x M.2 slot (2242-B) PCIe/SATA support	2 x 2.5" SATAIII HDD/SSD 1 x CFAST	1 x 2.5" SATAIII HDD/SSD	1 x 2.5" SATAIII HDD/SSD	1 x 2.5" SATAIII HDD/SSD	1 x 2.5" SATAIII HDD/SSD	1 x 2.5" SATAIII HDD/SSD	1 x 2.5" SATAIII HDD/SSD 1 x CFAST
Power	+9V~36V DC In	+9V~36V DC In	+9V~36V DC In	+9V~36V DC In (with Ignition)	+12V DC In	+12V DC In	+12V, +16V~24V DC In	+9V~36V DC In
Dimensions (W x H x D) mm	228 x 71 x 212	260 x 80 x 200	217.5 x 45 x 148	270 x 80 x 202.5	218 x 45 x 148	217.5 x 45 x 148	217.5 x 45 x 148	217.5 x 45 x 148
System Weight	3.0 kg	4.0 kg	2.0 kg	3.5 kg	2.0 kg	2.0 kg	2.0 kg	2.0 kg
Operation temperature	-40°C~70°C with SSD	0°C~50°C with SSD	-20°C~50°C with SSD	-30°C~60°C with mSATA	-10°C~60°C with SSD	0°C~40°C with SSD	-40°C~40°C for E3940 0°C~40°C for J3455 with SSD	-20°C~55°C with SSD
Operating System	Windows 10 IoT LTSC 2019 64 bit/ Ubuntu 18.04 (kernel: 4.19)	Windows 10 IoT LTSC 2019/ LTSC 2016/ Windows 8.1 (64bit)/ Windows 7 (64bit)/ Linux ubuntu 14.04 (64bit)	Windows 10 IoT LTSC 2016 64 bit/ Ubuntu 16.04 (kernel: 4.4)	Windows 8.1/ Windows 8/ Windows 7	Windows 10 IoT LTSC 2016 64 bit/ Ubuntu 16.04 (kernel: 4.4)	Windows 10 64 bit/ Ubuntu 17.04 (kernel: 4.4)	Windows 10 64 bit/ Ubuntu 17.04 (kernel: 4.4)	Windows 10 IoT/ Windows 8.1/ Windows 7/ Ubuntu 14.04/ WES 8.1 Industry Pro/ WES 7/

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Applied Computer

Selection Guide



Box PC				
Model	SA-5800	SA-5700	SA-5942	PA-8025
QR Code				
Pictures				
Processor	Intel® 7th / 6th Gen. Core™ i7 / i5 / i3 / Pentium® / Celeron® (LGA1151) 3.4~4.0GHz	Intel® 7th / 6th Gen. Core™ i7 / i5 / i3 / Pentium® / Celeron® (LGA1151) 3.4~4.0GHz	Intel® 4th Gen. Core™ i7 / i5 / i3 / Pentium® / Celeron® (LGA1150) 2.2~3.1GHz	Intel® Celeron® J1900 2.0GHz
Chipset	Intel® H110/Q170	Intel® H110/Q170	Intel® H81/Q87	Build-in CPU
Max. System Memory	32GB DDR4	32GB DDR4	16GB DDR3	8GB DDR3L
I/O Ports	Display	1 x VGA 1 x DP	2 x DVI-D 1 x DVI-I	1 x VGA
	USB	4 x USB 3.0 2 x USB 2.0	2 x USB 3.0 2 x USB 2.0 2 x USB 2.0 (option)	5 x USB 2.0
	Audio Line In / Line Out / Mic In	1 / 1 / 1	1 / 1 / 1	0 / 1 / 0
	LAN	2	2	1
	Serial Ports	2	4 + 2 (option)	4
	Parallel Port	--	1 (option)	1
	Keyboard / Mouse	--	--	--
	Cash Drawer Port	--	--	1
Drive Bays	1 x 2.5" SATA HDDs	2 x 2.5" SATA HDDs	2 x 2.5" SATA HDDs 1 x slim DVD-ROM	1 x 2.5" SATA HDD
Expansion Slots	1 x M.2 (2242) 1 x PCIe (x16)	1 x half-sized mPCIe 2 x PCI or 1 x PCIe (x16)	2 x PCI or 1 x PCIe (x16)	--
Power	DC In 12V	AC In 100~240V 50~60Hz	AC In 100~240V 50~60Hz	72~120W (AC Adapter)
Dimensions (W x H x D) mm	203 x 106 x 215	300 x 94 x 270	300 x 94 x 270	277 x 53 x 192
System Weight	3.5 kg	5 kg	5 kg	3 kg
Certifications	CE, FCC	CE, FCC	CE, FCC	CE, FCC
Operating System	Windows 10 IoT / Windows 8.1 / Windows 7 / Ubuntu 16.04	Windows 10 IoT / Windows 8.1 / Windows 7 / Ubuntu 16.04	Windows 10 IoT / Windows 8.1 / Windows 7 / Ubuntu 14.04	Windows 10 IoT Enterprise / Windows 7 / POSReady 7

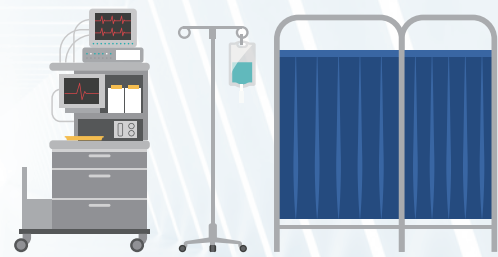
*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Panel PC



Panel PC

Selection Guide

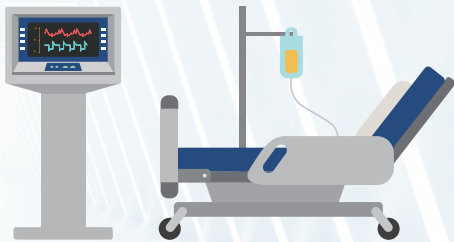


		21.5" High End		21.5" Entry	19" High End	19" Entry
Model		SP-S214	SP-S216	SP-S211	SP-6269	SP-6159
QR Code						
Pictures						
Panel Spec	Display Type	FHD	FHD	FHD	SXGA	SXGA
	Max. Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1280 x 1024	1280 x 1024
	Pixel Pitch	0.248 x 0.248	0.248 x 0.248	0.248 x 0.248	0.294 x 0.294	0.294 x 0.294
	Brightness (cd/m²)	350	350 / 1600	350 / 1600	350	350
	Response Time (Tr + Td)	22 ms	22 ms	22 ms	10 ms	10 ms
	Viewing Angle (up / down / left / right)	89/89/89/89	89/89/89/89	89/89/89/89	80/80/85/85	80/80/85/85
Processor		Intel® Core™ i7-7700T Core™ i5-7500T Core™ i3-7101TE Celeron® G3930TE	Intel® Core™ i7-7700T/6700TE Core™ i5-7500T/6500TE Core™ i3-7101TE/6100TE Pentium® G4400TE Celeron® G3930TE Celeron® G3900TE	Intel® Celeron® J3455 4C 2.3 GHz	Intel® Core™ i7-6700TE Core™ i5-6500TE Core™ i3-6100TE Pentium® G4400TE Celeron® G3900TE	Intel® Celeron® N3350 2C 2.4 GHz Pentium® N4200 4C 2.5 GHz Atom™ x7 E3950 4C 2.0 GHz
Chipset		Intel® Q170/H110	Intel® Q170/H110	SoC	Intel® Q170/H110	SoC
Max. System Memory		32GB DDR4 SO-DIMM	32GB DDR4 SO-DIMM	8GB DDR3L	32GB DDR4 SO-DIMM	8GB DDR3L
I / O PORTS	Display	2 x DVI-D	1 x DVI-I	1 x DVI-D 1 x HDMI (4K)	1 x DVI-I	1 x DVI-D 1 x HDMI
	USB	4 x USB 3.0 4 x USB 2.0	4 x USB 3.0	3 x USB 3.0	4 x USB 3.0	3 x USB 3.0
	Audio Line In / Line Out / Mic In	1 / 1 / 1	1 / 1 / 1	– / 1 / 1	1 / 1 / 1	– / 1 / 1
	LAN	2	2	2	2	2
	Serial Ports	4	4	2	4	2
	Parallel Port	1	–	–	–	--
	Digital I/O Port	–	8in / 8out	–	8in / 8out	--
	Keyboard / Mouse	–	–	–	–	--
Fan		Fan	Fanless	Fanless	Fanless	Fanless
Drive Bays		2 x 2.5" SATAIII HDD	2 x 2.5" SATAIII HDD 1 x CFast card on board	1 x 2.5" SATAIII HDD	2 x 2.5" SATAIII HDD 1 x CFast card on board	1 x 2.5" SATAIII HDD
Touchscreen		Projected capacitive touch	Projected capacitive touch	Projected capacitive touch	5W analog resistive	5W analog resistive
Construction		Electro galvanized steel chassis Stainless steel front bezel	Electro galvanized steel chassis Stainless steel front bezel	Electro galvanized steel chassis Stainless steel front bezel	Electro galvanized steel chassis Aluminum front bezel	Electro galvanized steel chassis Aluminum front bezel
Waterproof Level		IP65 (for front panel only)	IP65 (for front panel only)	IP65 (for front panel only)	IP65 (for front panel only)	IP65 (for front panel only)
Wall Mount Type		VESA 75/100	VESA 100	VESA 100	VESA 100	VESA 100
Power		AC In 100V~240V 50Hz~60Hz	DC In 9V~36V	DC In 9V~36V	DC In 9V~36V	DC In 9V~36V
Dimensions (W x H x D) mm		585 x 377 x 107	585 x 377 x 132	585 x 377 x 92	471 x 396 x 131	471 x 396 x 91
System Weight		11.8 kg	12.8 kg	10 kg	11.5 kg	10.7 kg
Operating System		Windows 10 IoT LTSC 2019	Windows 10 IoT LTSC 2019 / Ubuntu LTS 16.04	Windows 10 IoT LTSC 2019 / Ubuntu LTS 16.04	Windows 10 IoT LTSC 2019 / Windows 8.1 / Windows 7 / Ubuntu LTS 16.04	Windows 10 IoT LTSC 2019 / Ubuntu LTS 16.04
Certifications		CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Panel PC

Selection Guide

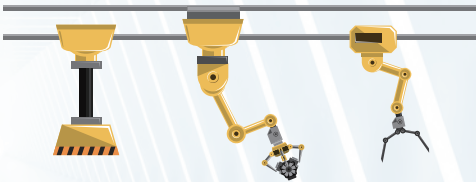


		17" High End			
Model		SP-S174	SP-7167	SP-6567	SP-6267
QR Code					
Pictures					
Panel Spec	Display Type	SXGA	SXGA	SXGA	SXGA
	Max. Resolution	1280 x 1024	1280 x 1024	1280 x 1024	1280 x 1024
	Pixel Pitch	0.264 x 0.264	0.264 x 0.264	0.264 x 0.264	0.264 x 0.264
	Brightness (cd/m²)	350	350	350	350
	Response Time (Tr + Td)	30 ms	30 ms	30 ms	30 ms
	Viewing Angle (up / down / left / right)	80/80/85/85	80/80/85/85	80/80/85/85	80/80/85/85
Processor		Intel® Core™ i7-7700T Core™ i5-7500T Core™ i3-7101TE Celeron® G3930TE	Intel® Core™ i7-6700TE Core™ i5-6500TE Core™ i3-6100TE Pentium® G4400TE Celeron® G3900TE	Intel® Core™ i7-6700TE Core™ i5-6500TE Core™ i3-6100TE Pentium® G4400TE Celeron® G3900TE	Intel® Core™ i7-6700TE Core™ i5-6500TE Core™ i3-6100TE Pentium® G4400TE Celeron® G3900TE
Chipset		Intel® Q170/H110	Intel® Q170/H110	Intel® Q170/H110	Intel® Q170/H110
Max. System Memory		32GB DDR4 SO-DIMM	32GB DDR4 SO-DIMM	32GB DDR4 SO-DIMM	32GB DDR4 SO-DIMM
I / O PORTS	Display	2 x DVI-D	1 x DVI-I	1 x DVI-I	1 x DVI-I
	USB	4 x USB 3.0 4 x USB 2.0	4 x USB 3.0	4 x USB 3.0	4 x USB 3.0
	Audio Line In / Line Out / Mic In	1 / 1 / 1	1 / 1 / 1	1 / 1 / 1	1 / 1 / 1
	LAN	2	2	2	2
	Serial Ports	4	4	4	4
	Parallel Port	1	—	—	—
	Digital I/O Port	--	8in / 8out	8in / 8out	8in / 8out
	Keyboard / Mouse	--	—	—	—
Fan		Fan	Fanless	Fanless	Fanless
Drive Bays		2 x 2.5" SATAIII HDD	2 x 2.5" SATAIII HDD 1 x CFast card on board	2 x 2.5" SATAIII HDD 1 x CFast card on board	2 x 2.5" SATAIII HDD 1 x CFast card on board
Touchscreen		Projected capacitive touch 5W analog resistive	Projected capacitive touch 5W analog resistive	Projected capacitive touch 5W analog resistive	5W analog resistive
Construction		Electro galvanized steel chassis Stainless steel front bezel	Electro galvanized steel chassis Stainless steel front bezel	Electro galvanized steel chassis Aluminum front bezel	Electro galvanized steel chassis Aluminum front bezel
Waterproof Level		IP65 (for front panel only)	IP65 (for front panel only)	IP65 (for front panel only)	IP65 (for front panel only)
Wall Mount Type		VESA 75/100	VESA 100	VESA 100	VESA 100
Power		AC In 100V~240V 50Hz~60Hz	DC In 9V~36V	DC In 9V~36V	DC In 9V~36V
Dimensions (W x H x D) mm		436 x 368 x 103	434 x 366 x 127	395 x 327 x 127	448 x 352 x 129
System Weight		9.1 kg	10.9 kg	10.5 kg	10.5 kg
Operating System		Windows 10 IoT LTSC 2019	Windows 10 IoT LTSC 2019 / Ubuntu LTS 16.04	Windows 10 IoT LTSC 2019 / Windows 8.1 / Windows 7 / Ubuntu LTS 16.04	Windows 10 IoT LTSC 2019 / Windows 8.1 / Windows 7 / Ubuntu LTS 16.04
Certifications		CE, FCC	CE, FCC	CE, FCC	CE, FCC

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Panel PC

Selection Guide



		17" Entry				15.6" Entry
Model		SP-7157	SP-6557	SP-7147	SP-6157	SP-7256
QR Code						
Pictures						
Panel Spec	Display Type	SXGA	SXGA	SXGA	SXGA	WXGA
	Max. Resolution	1280 x 1024	1280 x 1024	1280 x 1024	1280 x 1024	1366 x 768
	Pixel Pitch	0.264 x 0.264	0.264 x 0.264	0.264 x 0.264	0.264 x 0.264	0.252 x 0.252
	Brightness (cd/m²)	350	350	350	350	400
	Response Time (Tr + Td)	30 ms	30 ms	30 ms	30 ms	8 ms
	Viewing Angle (up / down / left / right)	80/80/85/85	80/80/85/85	80/80/85/85	80/80/85/85	70/80/80/80
Processor		Intel® Celeron® N3350 2C 2.4 GHz Pentium® N4200 4C 2.5 GHz Celeron® J3455 4C 2.3 GHz Atom™ x7 E3950 4C 1.8 GHz	Intel® Celeron® N3350 2C 2.4 GHz Pentium® N4200 4C 2.5 GHz Celeron® J3455 4C 2.3 GHz Atom™ x7 E3950 4C 1.8 GHz	Intel® E3845 1.91 GHz J1900 2.0 GHz	Intel® Celeron® N3350 2C 2.4 GHz Pentium® N4200 4C 2.5 GHz Celeron® J3455 4C 2.3 GHz Atom™ x7 E3950 4C 1.8 GHz	Intel® Celeron® N3350 Intel® Pentium® N4200
Chipset		SoC	SoC	SoC	SoC	SoC
Max. System Memory		8GB DDR3L	8GB DDR3L	8GB DDR3L	8GB DDR3L	8GB DDR3L
I / O PORTS	Display	1 x DVI-D 1 x HDMI	1 x DVI-D 1 x HDMI	1 x DVI-I	1 x DVI-D 1 x HDMI	1 x HDMI
	USB	3 x USB 3.0	3 x USB 3.0	3 x USB 2.0 1 x USB 3.0	3 x USB 3.0	4 x USB 3.0 1 x USB 2.0
	Audio Line In / Line Out / Mic In	— / 1 / 1	-- / 1 / 1	1 / 1 / 1	— / 1 / 1	-- / 1 / 1
	LAN	2	2	2	2	2
	Serial Ports	2	2	6	2	1
	Parallel Port	—	—	1 (optional)	—	--
	Digital I/O Port	—	—	4in / 4out	—	4in / 4out
	Keyboard / Mouse	—	—	2	—	--
Fan		Fanless	Fanless	Fanless	Fanless	Fanless
Drive Bays		1 x 2.5" SATAIII HDD	1 x 2.5" SATAIII HDD	2 x 2.5" SATAII HDD	1 x 2.5" SATAIII HDD	1 x 2.5" SATAIII HDD
Touchscreen		Projected capacitive touch 5W analog resistive	Projected capacitive touch 5W analog resistive	Projected capacitive touch 5W analog resistive	5W analog resistive	Projected capacitive touch
Construction		Electro galvanized steel chassis Stainless steel front bezel	Electro galvanized steel chassis Aluminum front bezel	Electro galvanized steel chassis Stainless steel front bezel	Electro galvanized steel chassis Aluminum front bezel	Plastic front bezel Aluminum die casting back cover
Waterproof Level		IP65 (for front panel only)	IP65 (for front panel only)	IP65 (for front panel only)	IP65 (for front panel only)	--
Wall Mount Type		VESA 100	VESA 100	VESA 75/100	VESA 100	VESA 75/100
Power		DC In 9V~36V	DC In 9V~36V	DC In 9V~36V	DC In 9V~36V	DC In 12V/24V
Dimensions (W x H x D) mm		436 x 368 x 87	396 x 328 x 75	436 x 368 x 103	448 x 352 x 89	391 x 246 x 48
System Weight		6.9 kg	6.5 kg	7.9 kg	7.1 kg	3.2 kg
Operating System		Windows 10 IoT LTSC 2019 / Ubuntu LTS 16.04	Windows 10 IoT LTSC 2019 / Ubuntu LTS 16.04	Windows 10 IoT LTSC 2019 / Windows7 / Ubuntu LTS 14.04	Windows 10 IoT LTSC 2019 / Ubuntu LTS 16.04	Windows 10 IoT LTSC 2019 / Ubuntu LTS 16.04
Certifications		CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Panel PC

Selection Guide



		15" High End			
Model		SP-S154	SP-7165	SP-6565	SP-6265
QR Code					
Pictures					
Panel Spec	Display Type	XGA	XGA	XGA	XGA
	Max. Resolution	1024 x 768	1024 x 768	1024 x 768	1024 x 768
	Pixel Pitch	0.297 x 0.297	0.297 x 0.297	0.297 x 0.297	0.297 x 0.297
	Brightness (cd/m²)	450	450	450	450
	Response Time (Tr + Td)	8 ms	8 ms	8 ms	8 ms
	Viewing Angle (up / down / left / right)	70/80/80/80	70/80/80/80	70/80/80/80	70/80/80/80
Processor		Intel® Core™ i7-7700T Core™ i5-7500T Core™ i3-7101TE Celeron® G3930TE	Intel® Core™ i7-6700TE Core™ i5-6500TE Core™ i3-6100TE Pentium® G4400TE Celeron® G3900TE	Intel® Core™ i7-6700TE Core™ i5-6500TE Core™ i3-6100TE Pentium® G4400TE Celeron® G3900TE	Intel® Core™ i7-6700TE Core™ i5-6500TE Core™ i3-6100TE Pentium® G4400TE Celeron® G3900TE
Chipset		Intel® Q170/H110	Intel® Q170/H110	Intel® Q170/H110	Intel® Q170/H110
Max. System Memory		32 GB DDR4 SO-DIMM	32 GB DDR4 SO-DIMM	32 GB DDR4 SO-DIMM	32 GB DDR4 SO-DIMM
I / O PORTS	Display	2 x DVI-D	1 x DVI-I	1 x DVI-I	1 x DVI-I
	USB	4 x USB 3.0 4 x USB 2.0	4 x USB 3.0	4 x USB 3.0	4 x USB 3.0
	Audio Line In / Line Out / Mic In	1 / 1 / 1	1 / 1 / 1	1 / 1 / 1	1 / 1 / 1
	LAN	2	2	2	2
	Serial Ports	4	4	4	4
	Parallel Port	1	--	—	—
	Digital I/O Port	—	8in / 8out	8in / 8out	8in / 8out
	Keyboard / Mouse	—	--	—	—
Fan		Fan	Fanless	Fanless	Fanless
Drive Bays		2 x 2.5" SATAIII HDD	2 x 2.5" SATAIII HDD 1 x CFast card on board	2 x 2.5" SATAIII HDD 1 x CFast card on board	2 x 2.5" SATAIII HDD 1 x CFast card on board
Touchscreen		Projected capacitive touch 5W analog resistive	Projected capacitive touch 5W analog resistive	Projected capacitive touch 5W analog resistive	5W analog resistive
Construction		Electro galvanized steel chassis Stainless steel front bezel	Electro galvanized steel chassis Stainless steel front bezel	Electro galvanized steel chassis Aluminum front bezel	Electro galvanized steel chassis Aluminum front bezel
Waterproof Level		IP65 (for front panel only)	IP65 (for front panel only)	IP65 (for front panel only)	IP65 (for front panel only)
Wall Mount Type		VESA 75/100	VESA 100	VESA 100	VESA 100
Power		AC In 100V~240V 50Hz~60Hz	DC In 9V~36V	DC In 9V~36V	DC In 9V~36V
Dimensions (W x H x D) mm		408 x 320 x 98	408 x 320 x 122	364 x 279 x 118	408 x 308 x 133
System Weight		8.1 kg	8.9 kg	10 kg	10.1 kg
Operating System		Windows 10 IoT LTSC 2019	Windows 10 IoT LTSC 2019 / Ubuntu LTS 16.04	Windows 10 IoT LTSC 2019 / Ubuntu LTS 16.04	Windows 10 IoT LTSC 2019 / Ubuntu LTS 16.04
Certifications		CE, FCC	CE, FCC	CE, FCC	CE, FCC

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Panel PC

Selection Guide

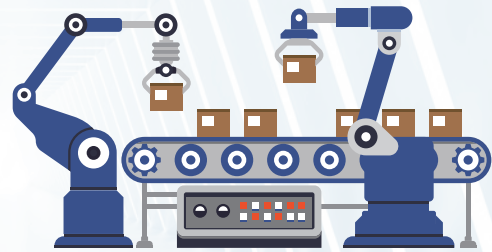


		15" Entry				
Model		SP-6555	SP-7155	SP-6155	SP-7145	SP-6145
QR Code						
Pictures						
Panel Spec	Display Type	XGA	XGA	XGA	XGA	XGA
	Max. Resolution	1024 x 768	1024 x 768	1024 x 768	1024 x 768	1024 x 768
	Pixel Pitch	0.297 x 0.297	0.297 x 0.297	0.297 x 0.297	0.297 x 0.297	0.297 x 0.297
	Brightness (cd/m²)	400	400	400	400	400
	Response Time (Tr + Td)	8 ms	8 ms	8 ms	8 ms	8 ms
	Viewing Angle (up / down / left / right)	80/80/80/80	80/80/80/80	80/80/80/80	80/80/80/80	80/80/80/80
Processor		Intel® Celeron® N3350 2C 2.4 GHz Pentium® N4200 4C 2.5 GHz Celeron® J3455 4C 2.3 GHz Atom™ x7 E3950 4C 1.8 GHz	Intel® Celeron® N3350 2C 2.4 GHz Pentium® N4200 4C 2.5 GHz Celeron® J3455 4C 2.3 GHz Atom™ x7 E3950 4C 1.8 GHz	Intel® Celeron® N3350 2C 2.4 GHz Pentium® N4200 4C 2.5 GHz Celeron® J3455 4C 2.3 GHz Atom™ x7 E3950 4C 1.8 GHz	Intel® E3845 1.91 GHz J1900 2.0 GHz	Intel® E3845 1.91 GHz E3826 1.46 GHz J1900 2.0 GHz
Chipset		SoC	SoC	SoC	SoC	—
Max. System Memory		8GB DDR3L	8GB DDR3L	8GB DDR3L	8GB DDR3L	8GB DDR3L
I / O P O R T S	Display	1 x DVI-D 1 x HDMI	1 x DVI-D 1 x HDMI	1 x DVI-D 1 x HDMI	1 x DVI-I	1 x DVI-I
	USB	3 x USB 3.0	3 x USB 3.0	3 x USB 3.0	3 x USB 2.0 1 x USB 3.0	2 x USB 2.0 1 x USB 3.0
	Audio Line In / Line Out / Mic In	— / 1 / 1	— / 1 / 1	— / 1 / 1	1 / 1 / 1	— / 1 / 1
	LAN	2	2	2	2	2
	Serial Ports	2	2	2	6	4
	Parallel Port	—	—	—	1 (optional)	—
	Digital I/O Port	—	—	—	4in / 4out	—
	Keyboard / Mouse	—	—	—	2	—
Fan		Fanless	Fanless	Fanless	Fanless	Fanless
Drive Bays		1 x 2.5" SATAIII HDD	1 x 2.5" SATAIII HDD	1 x 2.5" SATAIII HDD	2 x 2.5" SATAII HDD	1 x 2.5" SATAII HDD 1 x CFast card on board
Touchscreen		Projected capacitive touch 5W analog resistive	Projected capacitive touch 5W analog resistive	5W analog resistive	Projected capacitive touch 5W analog resistive	5W analog resistive
Construction		Electro galvanized steel chassis Aluminum front bezel	Electro galvanized steel chassis Stainless steel front bezel	Electro galvanized steel chassis Aluminum front bezel	Electro galvanized steel chassis Stainless steel front bezel	Electro galvanized steel chassis Aluminum front bezel
Waterproof Level		IP65 (for front panel only)	IP65 (for front panel only)	IP65 (for front panel only)	IP65 (for front panel only)	IP65 (for front panel only)
Wall Mount Type		VESA 100	VESA 100	VESA 100	VESA 75/100	VESA 75/100
Power		DC In 9V~36V	DC In 9V~36V	DC In 9V~36V	DC In 9V~36V	DC In 9V~36V
Dimensions (W x H x D) mm		365 x 280 x 76	408 x 320 x 82	408 x 308 x 88	408 x 320 x 98	408 x 308 x 70
System Weight		5.7 kg	6.0 kg	6.3 kg	6.8 kg	5.4 kg
Operating System		Windows 10 IoT LTSC 2019 / Ubuntu LTS 16.04	Windows 10 IoT LTSC 2019 / Ubuntu LTS 16.04	Windows 10 IoT LTSC 2019 / Ubuntu LTS 16.04	Windows 10 IoT LTSC 2019 / Windows 7 / Ubuntu LTS 14.04	Windows 10 IoT LTSC 2019 / Windows 8.1 / Windows 7 / WES 8.1 Industry Pro / WES 7
Certifications		CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Panel PC

Selection Guide



		10.4" Entry			8.4" Entry	7"
Model		SP-6550	SP-6150	SP-6140	SP-6558	PPC-1208
QR Code						
Pictures						
Panel Spec	Display Type	SVGA	SVGA	XGA	SVGA	WVGA / WSVGA
	Max. Resolution	800 x 600	800 x 600	1024 x 768	800 x 600	800 x 480 / 1024 x 600
	Pixel Pitch	0.264 x 0.264	0.264 x 0.264	0.264 x 0.264	0.264 x 0.264	0.191 x 0.191 / 0.15 x 0.15
	Brightness (cd/m²)	400	400	400	600	500 / 500
	Response Time (Tr + Td)	35 ms	35 ms	35 ms	16 ms	16 ms / 25ms
Viewing Angle (up / down / left / right)		60/70/80/80	60/70/80/80	60/70/80/80	70/65/75/75	60/60/70/70 / 75/75/70/75
Processor		Intel® Celeron® N3350 2C 2.4 GHz Pentium® N4200 4C 2.5 GHz Celeron® J3455 4C 2.3 GHz Atom™ x7 E3950 4C 1.8 GHz	Intel® Celeron® N3350 2C 2.4 GHz Pentium® N4200 4C 2.5 GHz Celeron® J3455 4C 2.3 GHz Atom™ x7 E3950 4C 1.8 GHz	Intel® E3845 1.91 GHz E3826 1.46 GHz J1900 2.0 GHz	Intel® Celeron® N3350 2C 2.4 GHz Pentium® N4200 4C 2.5 GHz Celeron® J3455 4C 2.3 GHz Atom™ x7 E3950 4C 1.8 GHz	Freescale ARM Cortex A8 i.MX515 800 MHz
Chipset		SoC	SoC	—	SoC	--
Max. System Memory		8GB DDR3L	8GB DDR3L	8GB DDR3L	8GB DDR3L	512MB DDR2
I / O P O R T S	Display	1 x DVI-D 1 x HDMI	1 x DVI-D 1 x HDMI	1 x DVI-I	1 x DVI-D 1 x HDMI	--
	USB	3 x USB 3.0	3 x USB 3.0	2 x USB 2.0 1 x USB 3.0	3 x USB 3.0	2 x USB 2.0
	Audio Line In / Line Out / Mic In	— / 1 / 1	-- / 1 / 1	— / 1 / 1	-- / 1 / 1	-- / 1 / --
	LAN	2	2	2	2	1
	Serial Ports	2	2	4	2	2
	Parallel Port	—	--	—	—	--
	Digital I/O Port	—	--	—	--	3 in / 3 out
	Keyboard / Mouse	—	--	—	—	--
Fan		Fanless	Fanless	Fanless	Fanless	Fanless
Drive Bays		1 x 2.5" SATAIII HDD	1 x 2.5" SATAIII HDD	1 x 2.5" SATAII HDD 1 x CFast card on board	1 x 2.5" SATAIII HDD	N / A
Touchscreen		Projected capacitive touch 5W analog resistive	5W analog resistive	5W analog resistive	Projected capacitive touch 5W analog resistive	Resistive type 4-wire
Construction		Electro galvanized steel chassis Aluminum front bezel	Electro galvanized steel chassis Aluminum front bezel	Electro galvanized steel chassis Aluminum front bezel	Electro galvanized steel chassis Aluminum front bezel	Electro galvanized steel chassis, Aluminum front bezel
Waterproof Level		IP65 (for front panel only)	IP65 (for front panel only)	IP65 (for front panel only)	IP65 (for front panel only)	IP65 (for front panel only)
Wall Mount Type		VESA 100	VESA 100	VESA 75/100	VESA 100	VESA 75
Power		DC In 9V~36V	DC In 9V~36V	DC In 9V~36V	DC In 9V~36V	DC In 12V/9V~36V
Dimensions (W x H x D) mm		259 x 216 x 74	278 x 229 x 78	278 x 229 x 77	224 x 176 x 76	235 x 150 x 42
System Weight		3 kg	3.4 kg	3.5 kg	2 kg	1.4 kg
Operating System		Windows 10 IoT LTSC 2019 / Windows 7 / Ubuntu LTS 14.04	Windows 10 IoT LTSC 2019 / Ubuntu LTS 16.04	Windows 10 IoT LTSC 2019 / Windows 8.1 / Windows 7 / WES 8.1 Industry Pro / WES 7	Windows 10 IoT LTSC 2019 / Windows 7 / Ubuntu LTS 14.04	Windows CE 6.0 / Ubuntu LTS 10.04
Certifications		CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

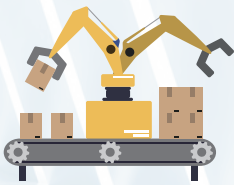
*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Full IP66 / IP69K Panel PC



Full IP66 / IP69K Panel PC

Selection Guide



		21.5" High End	21.5" Entry	17" High End	17" Entry
Model		SG-S216	SG-S211	SG-S176	SG-S171
QR Code					
Pictures					
Panel Spec	Display Type	TFT LCD (LED backlight)	TFT LCD (LED backlight)	TFT LCD (LED backlight)	TFT LCD (LED backlight)
	Max. Resolution	1920 x 1080	1920 x 1080	1280 x 1024	1280 x 1024
	Pixel Pitch	0.248 x 0.248	0.248 x 0.248	0.264 x 0.264	0.264 x 0.264
	Brightness (cd/m²)	350	350	350	350
	Response Time (Tr + Td)	22 ms	22 ms	30 ms	30 ms
	Viewing Angle (up / down / left / right)	89/89/89/89	89/89/89/89	85/85/85/85	85/85/85/85
Processor		Intel® 7th Gen. Core™ i5-7300U Pentium® 4415U	Intel® Celeron® J3455	Intel® 7th Gen. Core™ i5-7300U Pentium® 4415U	Intel® Celeron® J3455 Atom™ x7-E3950
Chipset		Kabylake-U SoC	Apollo Lake SoC	Kabylake-U SoC	Apollo Lake SoC
Max. System Memory		DDR4 16GB	DDR3L 8GB	DDR4 16GB	DDR3L 8GB
I/O PORTS	Display	—	—	—	—
	USB	2 x M12 waterproof connector 4 x USB 2.0	2 x M12 waterproof connector 4 x USB 2.0	2 x M12 waterproof connector 4 x USB 2.0	2 x M12 waterproof connector 4 x USB 2.0
	Audio Line In / Line Out / Mic In	—	—	—	—
	LAN	2	2	2	2
	Serial Ports	1	1	1	—
	Parallel Port	—	—	—	—
	Digital I/O Port	—	—	—	—
	Keyboard / Mouse	—	—	—	—
Fan		Fanless	Fanless	Fanless	Fanless
Drive Bays		1 x 2.5" HDD	1 x 2.5" HDD	1 x 2.5" HDD	1 x 2.5" HDD
Touchscreen		Projected capacitive touch 5W analog resistive	Projected capacitive touch 5W analog resistive	Projected capacitive touch 5W analog resistive	Projected capacitive touch 5W analog resistive
Construction		Stainless SUS304 / SUS316	Stainless SUS304 / SUS316	Stainless SUS304 / SUS316	Stainless SUS304 / SUS316
Waterproof Level		IP66 / IP69K	IP66 / IP69K	IP66 / IP69K	IP66 / IP69K
Wall Mount Type		VESA 100	VESA 100	VESA 100	VESA 100
Power		DC In 12V/24V	DC In 12V/24V	DC In 12V/24V	DC In 9V~36V
Dimensions (W x H x D) mm		590 x 395 x 70	590 x 395 x 70	450 x 381 x 70	450 x 381 x 70
System Weight		9.5 kg	9.5 kg	8.5 kg	8.5 kg
Operating System		Windows 10 IoT LTSC 2019 / Ubuntu 16.04	Windows 10 IoT LTSC 2019 / Ubuntu 16.04	Windows 10 IoT LTSC 2019 / Ubuntu 16.04	Windows 10 IoT LTSC 2019 / Ubuntu 16.04
Certifications		CE, FCC, IP66/69K, NEMA 4X	CE, FCC, IP66/69K, NEMA 4X	CE, FCC, IP66/69K, NEMA 4X	CE, FCC, IP66/69K, NEMA 4X

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Full IP66 / IP69K Panel PC

Selection Guide



		15" High End		15" Entry	
Model		SG-S156	SG-G156	SG-S151	SP-7755
QR Code					
Pictures					
Panel Spec	Display Type	XGA	XGA	XGA	XGA
	Max. Resolution	1024 x 768	1024 x 768	1024 x 768	1024 x 768
	Pixel Pitch	0.297 x 0.297	0.297 x 0.297	0.297 x 0.297	0.297 x 0.297
	Brightness (cd/m²)	450	450	450	450
	Response Time (Tr + Td)	8 ms	8 ms	8 ms	8 ms
	Viewing Angle (up / down / left / right)	70/80/80/80	70/80/80/80	70/80/80/80	70/80/80/80
Processor		Intel® Core™ i5-7300U Pentium® 4415U	Intel® Core™ i5-7300U Pentium® 4415U	Intel® Pentium® N4200 Intel® Atom™ x7 E3950	Intel® Celeron® N3350 Intel® Atom™ x7 E3950
Chipset		SoC	SoC	SoC	SoC
Max. System Memory		16GB DDR4	16GB DDR4	8GB DDR3L	8GB DDR3L
I / O PORTS	Display	—	—	—	—
	USB	4 x USB 2.0	4 x USB 2.0	4 x USB 2.0	2 x USB 3.0
	Audio Line In / Line Out / Mic In	—	—	—	—
	LAN	2	2	2	2
	Serial Ports	1	1	1	1
	Parallel Port	—	—	—	—
	Digital I/O Port	—	—	—	—
	Keyboard / Mouse	—	—	—	—
Fan		Fanless	Fanless	Fanless	Fanless
Drive Bays		1 x 2.5" SATAIII HDD	1 x 2.5" SATAIII HDD	1 x 2.5" SATAIII HDD	1 x 2.5" SATAIII HDD
Touchscreen		Projected capacitive touch 5W analog resistive	Projected capacitive touch 5W analog resistive	Projected capacitive touch 5W analog resistive	Projected capacitive touch 5W analog resistive
Construction		Stainless SUS304 / SUS316	Aluminum	Stainless SUS304 / SUS316	Aluminum
Waterproof Level		IP66 / IP69K	IP66	IP66 / IP69K	IP66
Wall Mount Type		VESA 100	VESA 100	VESA 100	VESA 100
Power		DC In 12V/24V	DC In 12V/24V	DC In 12V/16V~24V	DC In 12V/24V
Dimensions (W x H x D) mm		420 x 335 x 70	365 x 279 x 99	420 x 335 x 70	365 x 279 x 99
System Weight		7.5 kg	7.2 kg	7.5 kg	7.2 kg
Operating System		Windows 10 IoT LTSC 2019 / Ubuntu 16.04	Windows 10 IoT LTSC 2019 / Ubuntu 16.04	Windows 10 IoT LTSC 2019 / Ubuntu 16.04	Windows 10 IoT LTSC 2019 / Ubuntu 16.04
Certifications		CE, FCC	CE, FCC	CE, FCC	CE, FCC

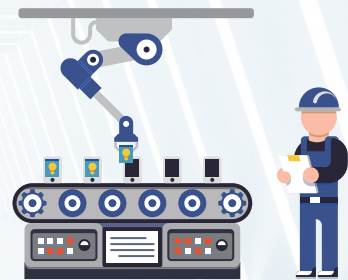
*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Open Frame Computer



High End OFC

Selection Guide

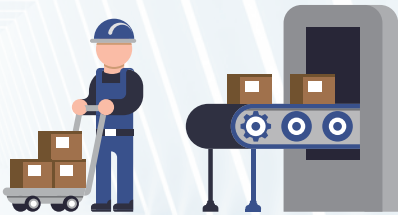


		19"	17"	15"
Model		SP-626x OFC Series		
QR Code				
Pictures				
Panel Spec	Display Type	XGA	SXGA	SXGA
	Max. Resolution	1024 x 768	1280 x 1024	1280 x 1024
	Pixel Pitch	0.297 x 0.297	0.294 x 0.294	0.264 x 0.264
	Brightness (cd/m²)	400	350	350
	Response Time (Tr + Td)	8 ms	10 ms	30 ms
	Viewing Angle (up/down/left/right)	80/80/80/80	80/80/85/85	80/80/85/85
Processor		Intel® Core™ i7-6700TE Core™ i5-6500TE Core™ i3-6100TE Pentium® G4400TE Celeron® G3900TE	Intel® Core™ i7-6700TE Core™ i5-6500TE Core™ i3-6100TE Pentium® G4400TE Celeron® G3900TE	Intel® Core™ i7-6700TE Core™ i5-6500TE Core™ i3-6100TE Pentium® G4400TE Celeron® G3900TE
Chipset		Intel® Q170/H110	Intel® Q170/H110	Intel® Q170/H110
Max. System Memory		32GB DDR4 SO-DIMM	32GB DDR4 SO-DIMM	32GB DDR4 SO-DIMM
I / O PORTS	Display	1 x DVI-D	1 x DVI-D	1 x DVI-D
	USB	4 x USB 3.0	4 x USB 3.0	4 x USB 3.0
	Audio Line In / Line Out / Mic In	1 / 1 / 1	1 / 1 / 1	1 / 1 / 1
	LAN	2	2	2
	COM Ports	4	4	4
	Parallel Port	--	--	--
	Digital I/O	8in / 8out	8in / 8out	8in / 8out
	Keyboard / Mouse	--	--	--
Storage		1 x 2.5" SATAIII HDD 1 x CFast card on board	1 x 2.5" SATAIII HDD 1 x CFast card on board	1 x 2.5" SATAIII HDD 1 x CFast card on board
Touchscreen		(ELO) 5W analog resistive	(ELO) 5W analog resistive	(ELO) 5W analog resistive
Construction		Electro galvanized steel chassis	Electro galvanized steel chassis	Electro galvanized steel chassis
Wall Mount Type		VESA 100	VESA 100	VESA 100
Power		DC In 9V~36V	DC In 9V~36V	DC In 9V~36V
Dimensions (W x H x D) mm		451 x 376 x 130.9	428 x 322 x 118.6	388 x 288 x 122.6
System Weight		10.0 kg	9.3 kg	9.0 kg
Operating System		Windows 10 IoT LTSC 2016 64 bit / Windows 8.1 / Windows 7 / Ubuntu LTS 16.04	Windows 10 IoT LTSC 2016 64 bit / Windows 8.1 / Windows 7 / Ubuntu LTS 16.04	Windows 10 IoT LTSC 2016 64 bit / Windows 8.1 / Windows 7 / Ubuntu LTS 16.04

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Entry OFC

Selection Guide



		19"	17"	15"	10.4"	7"
Model		SP-615x OFC Series				PPC-1208 OFC
QR Code						
Pictures						
Panel Spec	Display Type	SXGA	SXGA	XGA	SVGA	WVGA
	Max. Resolution	1280 x 1024	1280 x 1024	1024 x 768	800 x 600	800 x 480
	Pixel Pitch	0.294 x 0.294	0.264 x 0.264	0.297 x 0.297	0.264 x 0.264	0.191 x 0.191
	Brightness (cd/m²)	350	350	400	400	500
	Response Time (Tr + Td)	10 ms	30 ms	8 ms	35 ms	16 ms
	Viewing Angle (up/down/left/right)	80/80/85/85	80/80/85/85	80/80/80/80	60/70/80/80	60/60/70/70
Processor		Intel® Celeron® N3350 2C 2.4 GHz Pentium® N4200 4C 2.5 GHz Celeron® J3455 4C 2.3 GHz Atom™ x7 E3950 4C 1.8 GHz	Intel® Celeron® N3350 2C 2.4 GHz Pentium® N4200 4C 2.5 GHz Celeron® J3455 4C 2.3 GHz Atom™ x7 E3950 4C 1.8 GHz	Intel® Celeron® N3350 2C 2.4 GHz Pentium® N4200 4C 2.5 GHz Celeron® J3455 4C 2.3 GHz Atom™ x7 E3950 4C 1.8 GHz	Intel® Celeron® N3350 2C 2.4 GHz Pentium® N4200 4C 2.5 GHz Celeron® J3455 4C 2.3 GHz Atom™ x7 E3950 4C 1.8 GHz	Freescall™ ARM Cortex A8™ i.MX515 800 MHz
Chipset		--	--	--	--	--
Max. System Memory		8GB DDR3L	8GB DDR3L	8GB DDR3L	8GB DDR3L	512MB
I / O Ports	Display	1 x DVI-D / 1 x HDMI	1 x DVI-D / 1 x HDMI	1 x DVI-D / 1 x HDMI	1 x DVI-D / 1 x HDMI	--
	USB	3 x USB 3.0	3 x USB 3.0	3 x USB 3.0	3 x USB 3.0	2 x USB 2.0
	Audio Line In / Line Out / Mic In	-- / 1 / 1	-- / 1 / 1	-- / 1 / 1	-- / 1 / 1	-- / 1 / --
	LAN	2	2	2	2	1 x 10/100 Mbps
	COM Ports	2	2	2	2	2
	Parallel Port	--	--	--	--	--
	Digital I/O	--	--	--	--	--
	Keyboard / Mouse	--	--	--	--	--
Storage		1 x 2.5" SATAIII HDD	1 x 2.5" SATAIII HDD	1 x 2.5" SATAIII HDD	1 x 2.5" SATAIII HDD	--
Touchscreen		5W analog resistive	5W analog resistive	5W analog resistive	5W analog resistive	Resistive type 4-wire
Construction		Electro galvanized steel chassis	Electro galvanized steel chassis	Electro galvanized steel chassis	Electro galvanized steel chassis	Electro galvanized steel chassis
Wall Mount Type		VESA 100	VESA 100	VESA 100	VESA 100	VESA 75
Power		DC In 9V~36V	DC In 9V~36V	DC In 9V~36V	DC In 9V~36V	DC In 12V/9V~36V
Dimensions (W x H x D) mm		451 x 376 x 90.28	428 x 332 x 88	388 x 288 x 86.7	217.5 x 202.8 x 68	223.3 x 144.3 x 36.6
System Weight		9.2 kg	5.6 kg	4.8 kg	2.8 kg	1.2 kg
Operating System		Windows 10 IoT LTSB 2016 64 bit / Ubuntu LTS 16.04	Windows 10 IoT LTSB 2016 64 bit / Ubuntu LTS 16.04	Windows 10 IoT LTSB 2016 64 bit / Ubuntu LTS 16.04	Windows 10 IoT LTSB 2016 64 bit / Ubuntu LTS 16.04	Windows CE 6.0

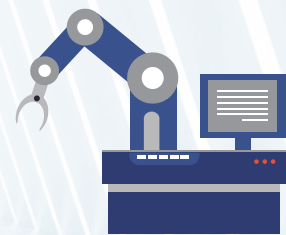
*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Industrial Monitor



Industrial Monitor

Selection Guide



Model		SP-C175	SP-C155	SP-C105	SP-C085
QR Code					
Pictures					
D I S P L A Y	Sizes	17"	15"	10.4"	8.4"
	Resolution	1280 x 1024 pixels	1024 x 768 pixels	800 x 600 pixels	800 x 600 pixels
	Brightness	350 nits	450 nits	450 nits	600 nits
	Lifetime	50,000 hours	50,000 hours	50,000 hours	30,000 hours
	Viewing Angle	Horizontal: -80°~80°, Vertical: -80°~70°			
	Touch	P-CAP touch / Resistive touch			
I / O P O R T S	VGA	1			
	DVI	DVI-I cable (support DVI-D signal only)			
	USB	Type A x 1 for connecting touch			
	HDMI	1			
	DC In Jack	DC12V x 1			
	OSD	Power Button x1, Auto x 1, Menu x 1, SEL+ x 1, SEL- x 1			
Stand-alone Stand		Option			
Wall-mounted Kit		Option			
IP Rating		IP65 (front Panel)			
Power Adaptor		12V/3.3A/40W			
Dimensions (W x H x D) mm		396 x 328 x 54	365 x 280 x 54	260 x 217 x 48	225 x 177 x 49
Weight		4.4 kg	3.5 kg	1.8 kg	1.4 kg
Operation Temp.		-10°C~60°C			
Certifications		CE, FCC			

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

IIoT Edge Controller



IIoT Edge Controller

Selection Guide



Model		SI-W000
QR Code		
Pictures		
SYSTEM	Processor	ARM Cortex-A8 32-bit RISC
	Speed	1 GHz
	Memory	512MB DDR3L
	Storage	8GB eMMC
	Display	1 x VGA
	Communications	1 x GbE LAN 2 x RS-232 (Tx, Rx, GND) 2 x RS-485 (D+, D-)
	Firmware	Protech Firmware
I/O PORTS	USB	1 x USB 2.0 Type A
	LAN	1 channel
	RS-232 (Tx, Rx, GND)	2 channels
	RS-485 (D+, D-)	1 channel
	RS-485 (D+, D-, GND.ISO)	1 channel
	SD Card Slot	1 x micro SD Card Slot
	SIM Slot	1
	Digital Input	--
	Digital Output	--
	Relay Output	--
	Thermocouple Input	--
Local I/O Module		1 channel with RS-232 Signal
Remote I/O Module		2 x Modbus RTU Module 1 x Modbus TCP Module
Expansion Slot		1 x full-sized mini-PCIe with USB2.0 Signal
Protocol Support		Modbus TCP/RTU, DHCP, HTTP, OPC UA, MQTT, CGI, FTP
Enclosure		Plastic
Mount Type		DIN-Rail, Wall Mount
Power		DC In 9V~50V
Dimensions (W x H x D) mm		90 x 115 x 49
Weight (approx)		285 g
Certifications		CE, FCC
Operation Systems		Embedded Linux

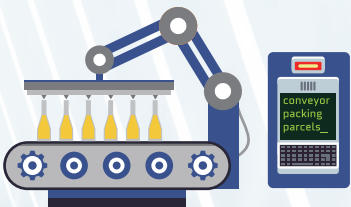
*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

Remote I/O Module



Remote I/O Module

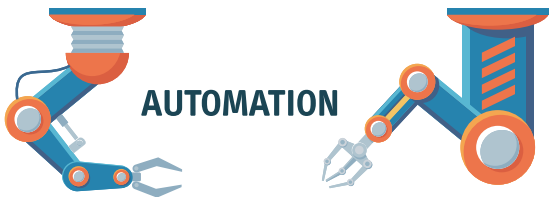
Selection Guide



Model		SI-W109	SI-W309	SI-W509	SI-W709
QR Code					
Pictures					
SYSTEM	Processor	8-bit Micro Controller			
	Memory	2 KB on-chip			
	Storage	64KB on-chip flash			
	Communications	RS-485 (D+, D-)			
	Firmware	Protech Firmware			
I/O PORTS	RS-485 (D+, D-)	1 channel			
	Analog Input	4 channels	--	--	--
	Analog Output	2 channels	--	--	--
	Digital Input	4 channels	8 channels	5 channels	--
	Digital Output	4 channels	8 channels	--	--
	Relay Output	--	--	6 channels	--
	Thermocouple Input	--	--	--	8 channels
Protocol Support		Modbus RTU			
Enclosure		Plastic			
Mount Type		DIN-Rail, Wall Mount			
Power		DC In 9V~50V			
Dimensions (W x H x D) mm		90 x 115 x 29			
Weight (approx)		220 g			
Certifications		CE, FCC			

*All information contained in this document is subject to change without prior notice. Please log on www.protech.com.tw to acquire latest information.

INDUSTRY4.0





2020

POS & IPC

SELECTION GUIDE

Established in 1980, Protech Systems Co., Ltd. specializes in the design and manufacturing of industrial PCs, automation products and embedded computers for companies around the world. Product lines include Single Board Computers, Embedded PC, POS, Panel PC and Handheld Mobile Computers. By applying advanced technology and elastic strategies, Protech is one of the leading industrial PC makers in this competitive industry. "Honesty, aggressiveness, and stable growth" are Protech's underlying business concepts. Protech's fundamentals are based on effective performance management, technology expertise, and innovation in order to continue the corporation's sustainable value. At the same time, with the core value of "technology, innovation, excellence, and sustainability," we are dedicated to provide top quality, high performance, and reliable professional service, and to create a win-win situation for both the customer and ourselves.

Worldwide Office



Taiwan Headquarter



Liu-Du Technology Park

▶ Protech Systems Co., Ltd.

No. 24, Lane 365, Yang Kuang Street,
Nei Hu District, Taipei 114,
Taiwan R.O.C
TEL:+886-2-8751-1111
FAX:+886-2-2627-4894
E-mail:sales@protech.com.tw
<http://www.protech.com.tw>

▶ Protech Japan Co., Ltd.

OSK Bldg, 6F, 6-25-14, Minami-ohi
Shinagawa-ku, Tokyo, 140-0013
TEL:+81-3-5753-8411
FAX:+81-3-3763-9282
E-mail:sam@protech-j.com
<http://www.protech-j.com>

▶ PROX SYSTEMS Germany GmbH.

Weststrasse 20a, 40721 Hilden
Düsseldorf, Germany
TEL:+49 (0) 2103-41898-0
FAX:+49 (0) 2103-41898-10
E-mail:sales@prox-systems.com
<http://www.prox-systems.com>

▶ Protech Technologies Inc.

950 Fee Ana St., Suite B
Placentia, CA 92870
TEL:+1-714-996-7200
FAX:+1-714-996-7300
E-mail:sales@protech-usa.net
<http://www.protech-usa.com>

▶ PROX SYSTEMS Spain S.L.

C/Albasanz 14 Bis 2ºD,
28037 Madrid, Spain
TEL:(+34) 917648559
Mobile:(+34) 661214507
E-mail:sales.spain@prox-systems.com
<http://www.prox-systems.com>

