

Light Industrial Panel PC



Model	AFL3-W07A-BT-R10	AFL3-W10A-BT-R10	AFL3-12A-BT-R10
Size	7"	10.1"	12.1"
Resolution	1024 x 600 (16:9)	1280 x 800 (16:9)	1024 x 768 (4:3)
Touchscreen	Projected capacitive type	Projected capacitive type	5-wire resistive type/projected capacitive type with USB interface
CPU / Chipset	Intel® Celeron® N2807 (dual core, 1.58 GHz)	Intel® Celeron® J1900 on-board SoC (quad core, 2 GHz)	Intel® Celeron® J1900 on-board SoC (quad core, 2 GHz)
Input / Output	2 x RS-232 COM port (DB-9 connector) 2 x USB 3.0 2 x GbE LAN 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x 9-30V Lockable power jack	1 x RS-232 COM port (RJ-45 connector) 1 x RS-232/422/485 COM port (DB-9 connector) (RI/5V/12V) 2 x USB 3.0 2 x USB 2.0 2 x RJ-45 for GbE LAN 1 x Power switch 1 x Audio port (line-out) 1 x Reset button 1 x AT/ATX switch 1 x 9-30V DC Lockable power jack	1 x RS-232 COM port (RJ-45 connector) 1 x RS-232/422/485 COM port (DB-9 connector) (RI/5V/12V) 2 x USB 3.0 2 x USB 2.0 2 x RJ-45 for GbE LAN 1 x Power switch 1 x Audio port (line-out) 1 x Reset button 1 x AT/ATX switch 1 x 9-30V Lockable power jack
Construction	ABS+PC		
Mounting	Panel, wall, stand and arm VESA 75mm x 75mm	Panel, wall, stand and arm VESA 75mm x 75mm	Panel, wall, rack, stand and arm VESA 75mm x 75mm / 100mm x 100mm
Operating Temperature (°C) (ambient with air flow)	-20°C ~ 50°C	-10°C ~ 50°C	-20°C ~ 50°C
Storage Temperature (°C)	-20°C ~ 60°C	-20°C ~ 60°C	-20°C ~ 60°C
Power Requirement	9V ~ 30V DC		



Model	AFL3-W15A-BT-R10	AFL3-W15B-H81-R10
Size	15.6"	
Resolution	1366 x 768 (16:9)	
Touchscreen	5-wire resistive type / projected capacitive type	
CPU / Chipset	Intel® Celeron® J1900 on-board SoC (quad core, 2 GHz)	Intel® Core™ i7/i5/i3, Pentium®, Celeron® processor (TDP 35W)/ Intel® H81
Input / Output	1 x RS-232 COM port (RJ-45 connector) 1 x RS-232/422/485 COM port (DB-9 connector) (RI/5V/12V) 2 x USB 2.0 2 x USB 3.0 2 x GbE LAN 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x Audio port (line-out) 1 x 9-30V Lockable power jack	1 x RS-232 COM port (DB-9 connector) 1 x RS-232/422/485 COM port (DB-9 connector) (RI/5V/12V) 2 x GbE LAN 4 x USB2.0 2 x USB3.0 1 x HDMI output 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x Audio port (line-out) 1 x 9-30V Lockable power jack
Construction	ABS+PC	
Mounting	Panel, wall, rack, stand and arm VESA 75mm x 75mm / 100mm x 100mm	Panel, wall, rack, stand and arm VESA 100mm x 100mm
Operating Temperature (°C) (ambient with air flow)	-20°C ~ 50°C	
Storage Temperature (°C)	-20°C ~ 60°C	
Power Requirement	9V ~ 30V DC	

RISC-based Panel PC



Model	IOVU-12F	IOVU-15F	IOVU-17F
LCD Size	12.1" (4:3)	15" (4:3)	17" (4:3)
Max. Resolution	1024(W) x 768(H)	1024(W) x 768(H)	1280(W) x 1024(H)
Touchscreen	Projected capacitive flat touch	Projected capacitive flat touch	Projected capacitive flat touch
CPU	Freescale™ i.MX6 Cortex™-A9 (quad core, 1 GHz)		
I/O Ports and Switches	1 x Gigabit PoE LAN port 2 x USB 2.0 host 1 x RS-232 full function (DB-9) 1 x RS-232/422/485 (DB-9), SW controllable 1 x Power input terminal block (2-pin)	1 x SD slot (up to 32 GB) (hidden) 1 x CAN 2.0 4 x GPIO 1 x DC jack 1 x Power on/off switch 1 x Reset button	
Construction	Aluminum front bezel + SECC rear		
Operating Temperature	0°C ~ 50°C	0°C ~ 50°C	0°C ~ 50°C
IP Rating	IP 65 compliant front panel	IP 65 compliant front panel	IP 65 compliant front panel
Power Requirement	12V ~ 36V DC		

Heavy Industrial Panel PC



Model	PPC-F12B	PPC-F15B	PPC-F17B
LCD	LCD Display 12" (4:3) Max. Resolution 1024(W) x 768(H)	15" (4:3) 1024(W) x 768(H)	17" (5:4) 1280(W) x 1024(H)
Motherboard	Intel® Celeron® J1900 on-board SoC (quad core, 2 GHz)		
RAM	Two 204-pin DDR3L SO-DIMM slots (system max. 8 GB)		
Touch	5-wire resistive type, single touch Projected capacitive type, 2-point touch		
Input Interfaces	2 x RJ-45 LAN port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 2 x RS-232 1 x RS-232/422/485	1 x VGA 1 x DC jack (4-pin) 1 x Terminal block 1 x Line-out (PPC-F15B, PPC-17B only) 1 x Power switch	
Expansion	1 x Full-size PCIe mini card slot 1 x Full-size PCIe mini Card slot colay mSATA (SATA2 only)		
Construction	Aluminum front bezel + SECC rear		
Operating Temperature (with air flow)	-10°C ~ 50°C		
Storage Temperature	-20°C ~ 60°C		
IP Level	IP 65 compliant front panel		
Power Input	9V ~ 36V DC		
Remote Management Device	Optional (IRIS-2400-R10)		



Smart Factory Solution Guide

Developing and Perfecting Your Smart Factory



Robot Controller



Machine Vision



Tablet PC



AFL3 Panel PC



HMI RISC Panel PC



Industrial Panel PC

www.icpamerica.com





Enabling Smart Factories

Smart factory solution improves the production efficiency and warehouse management accuracy. To catch the wave of automatic assembly, robot system will be a major role along with the machine vision and motion control solutions. For factory automation control terminals, the industrial computing solutions are the robust IP65 design, wide temperature, and flexible add-on card expansion. To elevate the efficiency of warehouse management, ICPA provides UHF RFID and 1D/2D barcode reader solutions with various form factors.



Surveillance System

Delivering high-performance, high-definition video encoding (1080p) at only 380 mW, the devices for smart factory application have the abilities to stream the video recorded on the capture box directly to tablets and smart phones. It is an easy way to add surveillance features on your existing embedded system, panel PC or tablet PC.



DM-F Series
IP 65 Flat Bezel Industrial Monitor

- 6.5" to 24" resistive/PCAP monitor
- Extended operating temperature: -20°C~60°C



HDC-301MS
1-channel PCIe Mini Capture Card

- 1-channel HDMI video capture card with H.264 hardware codec
- Video scaling down compression
- Windows® 7 32-bit/64-bit & Linux Ubuntu 10.04
- Record and stream video over networks or the Internet: VideoLAN VLC, AMCap and other DirectShow compatible software



HDB-301L
1-channel Capture Box

- 1-channel capture box with one HDMI input, one HDMI output and H.264 hardware codec
- High definition recorder for PC, full HD 1920 x 1080
- Video scaling down compression
- Windows® 7 32-bit/64-bit & Linux Ubuntu 10.04
- Record and stream video over networks or the Internet: VideoLAN VLC, AMCap and other DirectShow compatible software



Automatic Warehouse Management Solution



PPC-F Series
Heavy Industrial Panel PC

- Metal housing with IP 65 front protection
- Fanless Intel® Bay Trail processor
- PCAP/resistive touchscreen



UPC-V315-QM77
Forklift Panel PC

- Fully IP 65 compliant
- Fanless Intel® QM77 chipset with Intel® Core™ i7/i3 or Celeron® processor
- Wi-Fi, Bluetooth, RFID



ICEROCK3-T10-HU-R10
Tablet PC

- 10.1" 350 cd/m² TFT LCD with capacitive touch
- Intel® Celeron® 1047UE 1.4 GHz processor
- Fully IP 65 protection
- Bluetooth, Wi-Fi, 3.75G, GPS, 1D/2D barcode reader, RFID



AFL3 PPC Series
Light Industrial Panel PC

- Plastic housing with IP 65 front protection
- PCAP/resistive touchscreen
- Fanless Intel® Bay Trail processor



Robot Arm Manufacturing Solution



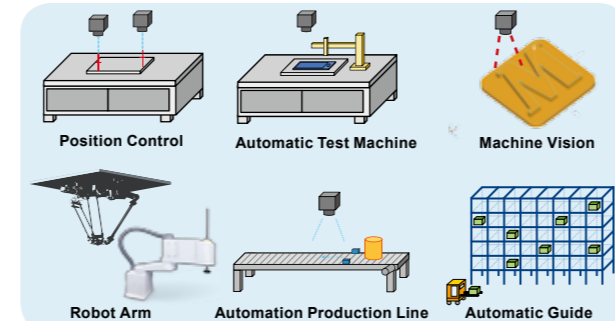
7A6
Robot Arm

- Payload: 7kg
- Rotation: 6-axis
- Speed: 6165 mm/s



Robot-TP-65M
6.5" Teach Pendant

- 33-key programmable keypad
- Completely dust and splash proof (IP 64)
- Drop test: 1 meter
- Robot stop button, three-position enabling switch and mode changeover switch



MDH-1000
Robot Controller

- Fanless design
- 8 axes of pulse type motor control
- 4-axis servo/step motor and 4-axis step motor
- 4-axis A/B phase encoder input with 32-bit counter



Machine Vision



ITDB-100L / ITDB-100HD
High Speed 2D Barcode Reader

Supporting remote monitoring and control via PC/NAS/Android phones & tablets



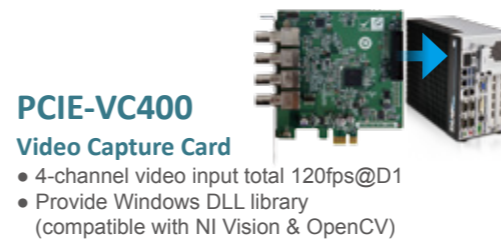
HSC-U032MS
USB 3.0 Lightweight Camera

- Supporting SuperSpeed USB 3.0 & opto-isolated external GPIO, up to 60fps
- Supporting OpenCV, Open eVision & MIL



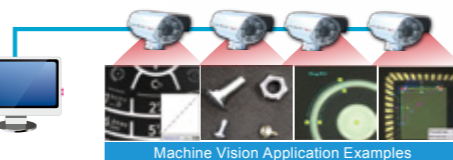
IOVU Series
HMI RISC Panel PC

- Freescale™ i.MX6 Cortex™-A9 (quad core, 1.0 GHz)
- Projected capacitive touchscreen, Wi-Fi, Bluetooth
- Android 4.2 OS
- One CAN 2.0 and four GPIO



PCI-E-VC400
Video Capture Card

- 4-channel video input total 120fps@D1
- Provide Windows DLL library (compatible with NI Vision & OpenCV)



Machine Vision Application Examples

