

UPC Series

# UPC-F12C-ULT3

Intel® Core™ i5 and Celeron® ULT Processor



## Features

- 12.1" fanless panel PC with Intel® Skylake ULT processor
- IP66 6-side protection with M12 connector I/O cover
- IP65 6-side protection with standard cable I/O cover
- Built-in wireless 802.11 a/b/g/n/ac and Bluetooth V4.0
- Operating temperature : -20°C ~ 60°C
- Flat glass PCAP touch with 6H hardness, resistive touch window



## Specifications

Model		UPC-F12CM-ULT3	UPC-F12C-ULT3
Display	LCD Display	12.1"	
	Max Resolution	1024(W) x 768(H)	
	Brightness (cd/m <sup>2</sup> )	600	
	Contrast Ratio	700:1	
	LCD Color	16.2M	
	Pixel Pitch (mm)	0.24(H) x 0.24(V)	
	Viewing Angle (H-V)	160° / 140°	
	Backlight MTBF (Hrs)	50,000	
Motherboard	CPU	6th generation Intel® Core™ i5 and Celeron® ULT processor	
	RAM	1 x 260-pin 2133/1867 MHz single-channel DDR4 SO-DIMMs	
	Ethernet	LAN1: PCIe GbE by Intel® I211 controller LAN2: PCIe GbE by Intel® I211 controller	
Touchscreen		P-CAP / Resistive Touch	
Input Interfaces	I/O Ports & Switch	M12 Type: 1 x 8-pin M12 connector for RS-232 1 x 8-pin M12 connector for RS-232/422/485 1 x 8-pin M12 connector for GbE LAN 2 x 8-pin M12 connector for two USB 2.0 1 x 5-pin M12 connector for DC jack (12V~36V DC)	Standard Type: 1 x DC jack (12V-36V DC) 1 x DC-in terminal block (12V-36V DC) 1 x HDMI 1 x VGA/CAN Bus 1 x RS-232 (COM1 RJ-45) 1 x RS-232/422/485 (COM2 RJ-45) 2 x LAN 2 x USB 2.0 2 x USB 3.1 Gen 1 (5Gb/s)
		Expansion	
Connectivity	Wi-Fi & BT	802.11 a/b/g/n/ac + Bluetooth v4.0	
	RFID	Reserved RFID antenna area (optional)	
Storage	1 x 2.5" HDD bay		
	1 x M.2 (B key 2242 with USB 2.0 and SATA signal)		
Physical	Construction	Aluminum die-casting	
	Mounting	VESA 100mm x 100mm	
	Net/Gross Weight (kg)	4.95 kg / 7.62 kg	5.02 kg / 7.40 kg
	Dimensions (W x L x D) (mm)	316 x 279 x 67	
Environment	Operating Temperature (with air flow)	-20°C ~ 60°C (without heater solution) -40°C ~ 60°C by project base	
	Storage Temperature	-20°C ~ 70°C	
	IP Level	Full IP65 or Full IP66 (with M12 connectors)	
	Safety	CE / FCC	
Power	Power Requirement	Power 1: 12V ~ 36V (terminal block)	
		Power 2: 12V ~ 36V (DC jack)	

## Ordering Information

### M12 Type

Part No.	Description
UPC-F12CM-ULT3-C/R/4G-R10	12.1" 600cd/m <sup>2</sup> XGA fanless ultra panel PC with Intel® 14nm 6th generation mobile Celeron® 3955U (15W) on-board processor (ULT), one 4GB DDR4 RAM, 802.11a/b/g/n/ac Wi-Fi module, resistive touch, M12 I/O, R10
UPC-F12CM-ULT3-C/PC/4G-R10	12.1" 600cd/m <sup>2</sup> XGA fanless ultra panel PC with Intel® 14nm 6th generation mobile Celeron® 3955U (15W) on-board processor (ULT), one 4GB DDR4 RAM, 802.11a/b/g/n/ac Wi-Fi module, PCAP touch, M12 I/O, R10
UPC-F12CM-ULT3-i5/R/4G-R10	12.1" 600cd/m <sup>2</sup> XGA fanless ultra panel PC with Intel® 14nm 6th generation mobile Core™ i5-6300U (15W) on-board processor (ULT), one 4GB DDR4 RAM, 802.11a/b/g/n/ac Wi-Fi module, resistive touch, M12 I/O, R10
UPC-F12CM-ULT3-i5/PC/4G-R10	12.1" 600cd/m <sup>2</sup> XGA fanless ultra panel PC with Intel® 14nm 6th generation mobile Core™ i5-6300U (15W) on-board processor (ULT), one 4GB DDR4 RAM, 802.11a/b/g/n/ac Wi-Fi module, PCAP touch, M12 I/O, R10

### Standard Type

Part No.	Description
UPC-F12C-ULT3-C/R/4G-R10	12.1" 600cd/m <sup>2</sup> XGA fanless ultra panel PC with Intel® 14nm 6th generation mobile Celeron® 3955U (15W) on-board processor (ULT), one 4GB DDR4 RAM, 802.11a/b/g/n/ac Wi-Fi module, resistive touch, R10
UPC-F12C-ULT3-C/PC/4G-R10	12.1" 600cd/m <sup>2</sup> XGA fanless ultra panel PC with Intel® 14nm 6th generation mobile Celeron® 3955U (15W) on-board processor (ULT), one 4GB DDR4 RAM, 802.11a/b/g/n/ac Wi-Fi module, PCAP touch, R10
UPC-F12C-ULT3-i5/R/4G-R10	12.1" 600cd/m <sup>2</sup> XGA fanless ultra panel PC with Intel® 14nm 6th generation mobile Core™ i5-6300U (15W) on-board processor (ULT), one 4GB DDR4 RAM, 802.11a/b/g/n/ac Wi-Fi module, resistive touch, R10
UPC-F12C-ULT3-i5/PC/4G-R10	12.1" 600cd/m <sup>2</sup> XGA fanless ultra panel PC with Intel® 14nm 6th generation mobile Core™ i5-6300U (15W) on-board processor (ULT), one 4GB DDR4 RAM, 802.11a/b/g/n/ac Wi-Fi module, PCAP touch, R10
UPC-F12C-ULT3-C/CA/PC/4G-R10	12.1" 600cd/m <sup>2</sup> XGA fanless ultra panel PC with Intel® 14nm 6th Generation Mobile Celeron®3955U (15W) on-board Processor (ULT), 1*4GB DDR4 RAM, 802.11a/b/g/n/ac WiFi module, with CAN bus, PCAP touch, R10
UPC-F12C-ULT3-i5/CA/PC/4G-R10	12.1" 600cd/m <sup>2</sup> XGA fanless ultra panel PC with Intel® 14nm 6th Generation Mobile Core™ i5-6300U (15W) on-board Processor (ULT), 1*4GB DDR4 RAM, 802.11a/b/g/n/ac WiFi module, with CAN bus, PCAP touch, R10

## Optional

Item	Description
63040-010060-110-RS	Power Adapter (for standard only)
63040-030080-000-RS	Water-proof Power Adapter (for M12 only)
CB-M12USB02-R20	USB Cable (for M12 only)
CB-M12RJ45-R20	LAN Cable (for M12 only)
CB-M12COM-R20	COM Port Cable (for M12 only)
Arm	ARM-11-RS
Stand	STAND-A12-RS STAND-C12-R10
MIFARE RFID Kit	UPC-F-MF-RFID-KIT01-R10 (ATO only)



USB cable  
(CB-M12USB02-R20)



RJ-45 LAN cable  
(CB-M12RJ45-R10)



DB-9 COM port Cable  
(CB-M12COM-R20)

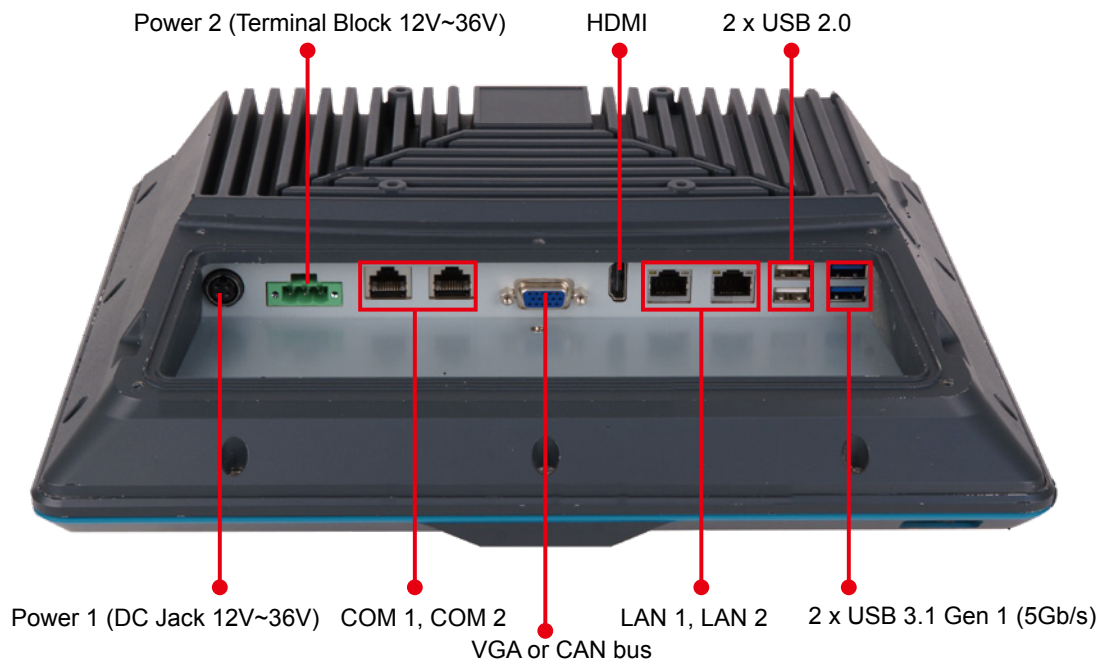


Water-proof Power Adapter  
(63040-030080-000-RS)

## Packing List

Item	Q'ty	Remark
Touch Pen	1	Resistive type only
Ferrite core	2	
D-Sub to RJ45 cable	2	for standard only
Waterproof plugs: Φ3	10	Φ3x2, Φ4x1, Φ5x1, cover x 6 (for standard only)
M12 to USB cable	1	for M12 only

I/O Interface



Standard IO cover



M12 IO cover

UPC-F12C Dimensions (Unit: mm)

