***Display System***

***w w w . i ei w or l d .c om***

**UPC Series**

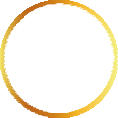
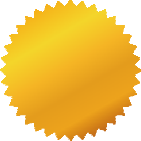
Intel® Core™ i5 and Celeron® ULT Processor

UPC-F12C-ULT3

# *Features*

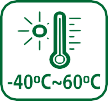
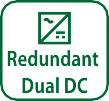


***Specifications***



* 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





|  |  |  |  |
| --- | --- | --- | --- |
| **Model** | | **UPC-F12CM-ULT3** | **UPC-F12C-ULT3** |
| Display | LCD Display | 12.1" | |
| Max Resolution | 1024(W) x 768(H) | |
| Brightness (cd/m²) | 600 | |
| Contrast Ratio | 700:1 | |
| LCD Color | 16.2M | |
| Pixel Pitch (mm) | 0.24(H) x 0.24(V) | |
| Viewing Angle (H-V) | 160**º** / 140**º** | |
| 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)   1. x LAN   2 x USB 2.0  2 x USB 3.1 Gen 1 (5Gb/s) |
| Expansion | | 1 x Full-size/half-size PCIe Mini card slot (PCIe x1 and USB 2.0 signals) | |
| 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) | |

***w w w . i ei w or l d .c om***

# *Ordering Information*

**M12 Type**

|  |  |
| --- | --- |
| Part No. | Description |
| UPC-F12CM-ULT3-C/R/4G-R10 | 12.1” 600cd/m² 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/m² 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/m² 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/m² 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/m² 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/m² 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/m² 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/m² 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/m² 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/m² 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) |

# *Packing List*

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)

***Display System***

|  |  |  |
| --- | --- | --- |
| 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 |

***w w w . i ei w or l d .c om***

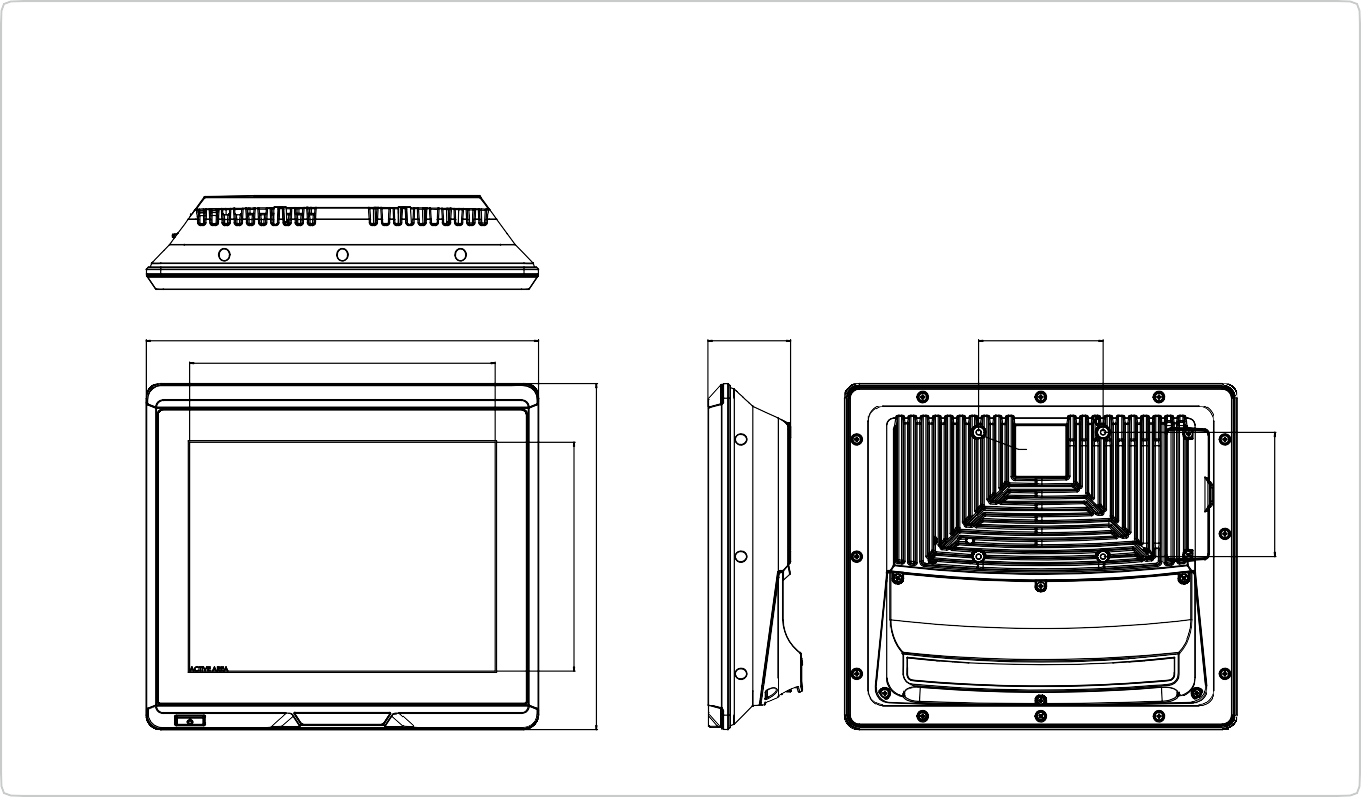
# *I/O Interface*

Power 2 (Terminal Block 12V~36V)

HDMI 2 x USB 2.0



***Display System***



100

66.50

315.64

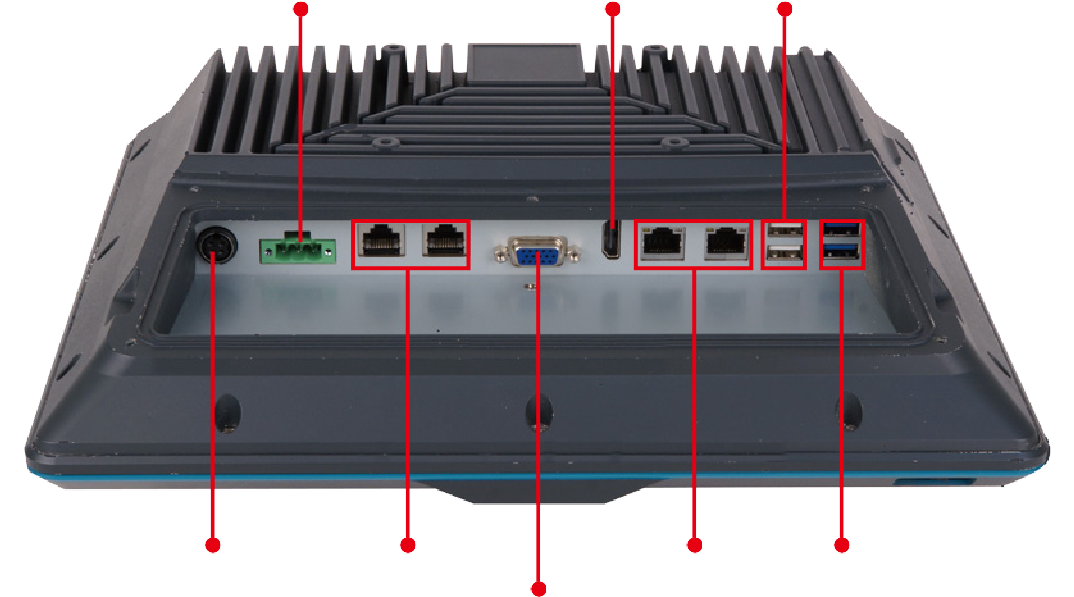
245.76

***UPC-F12C Dimensions (Unit: mm)***

184.32

278.64

100



Power 1 (DC Jack 12V~36V) COM 1, COM 2

LAN 1, LAN 2 2 x USB 3.1 Gen 1 (5Gb/s)

VGA or CAN bus



**Standard IO cover**



**M12 IO cover**