

# RES-1000

IP67 Rugged Embedded System with Intel® Core™ i7/i5/i3 U-series Processor (Skylake), 2 X-coded M12 GigE LAN, 2-port M12 USB 2.0, 2 M12 COM, High Performance, Fanless, -30°C to 70°C Extended Temperature



## Features

- Compact & Slim design, IP67 protection
- Fanless, -30°C to 70°C Operating Temperature
- 6th Generation Intel® Core™ i7/i5/i3 U-series SoC (Skylake-U)
- DDR4 2133MHz memory, up to 16GB
- Intel® HD Graphics 520 supports DirectX 12
- Dual X-coded M12 GigE LAN, iAMT 11.0 supported
- 2 M12 COM RS-232/422/485, 1 M12 for 2-port USB
- 9V to 36V DC Power Input, M12 Waterproof Connector
- One-stop customized Design and Manufacturing Services



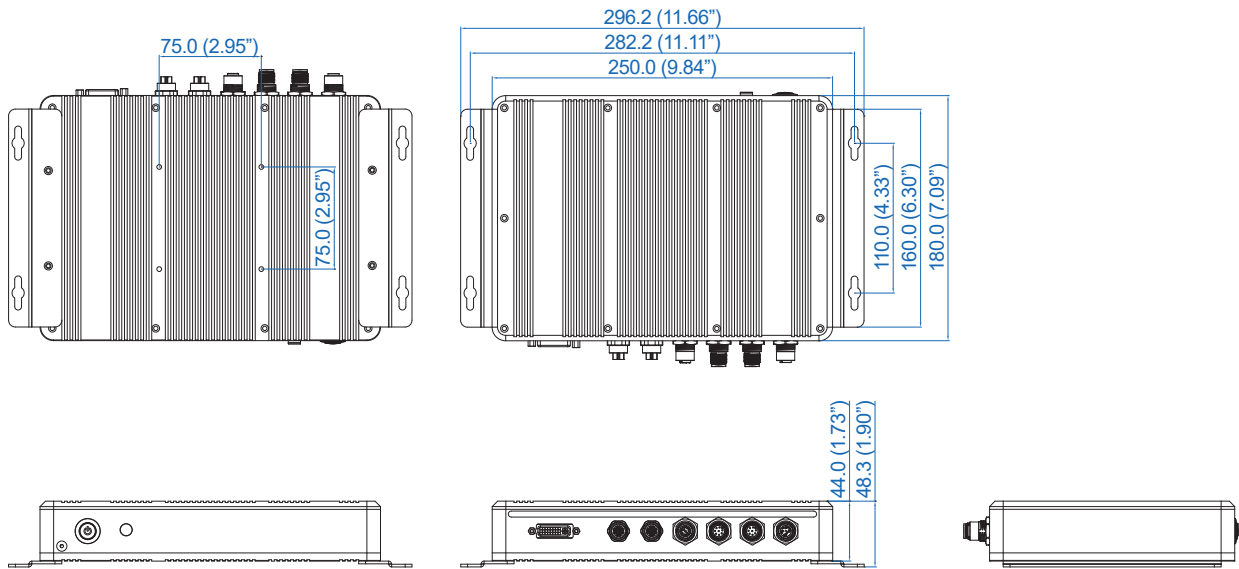
## Specifications

| System             |  |
|--------------------|--|
| Processor          | Intel® Core™ i7-6600U/i5-6300U/i3-6100U/Celeron® 3955U Processor (Skylake-U)   |
| Chipset            | Intel® SoC (Skylake)   |
| BIOS               | AMI  |
| SIO                | IT8786E  |
| Memory             | 1 DDR4 2133MHz SO-DIMM, up to 16GB   |
| I/O Interface      |  |
| Serial             | 2 COM RS-232/422/485, A-coded M12 Connector  |
| USB                | 1 2-port USB 2.0, A-coded M12 Connector  |
| LED                | Power, HDD   |
| Graphics           |  |
| Graphics Processor | Intel® HD Graphics 520   |
| Interface          | DVI-D : Up to 1920 x1200 @ 60Hz, IP67 Waterproof Connector   |
| Storage            |  |
| SATA               | 1 SATA III (6Gbps)   |
| mSATA              | 1 SATA III (Mini PCIe Type, 6Gbps)   |
| Storage Device     | <ul style="list-style-type: none"> <li>▪ 1 mSATA Socket</li> <li>▪ 1 Internal 2.5" SSD/HDD Bracket (Optional)</li> </ul> |
| Ethernet           |  |
| LAN 1              | Intel® I219LM GigE LAN supports iAMT 11.0, X-coded M12 Connector   |
| LAN 2              | Intel® I210 GigE LAN, X-coded M12 Connector  |
| Power              |  |
| Power Input        | 9V to 36V, DC-in   |
| Power Interface    | A-coded M12 Connector  |
| Power Switch       | IP67 Waterproof Power Button   |

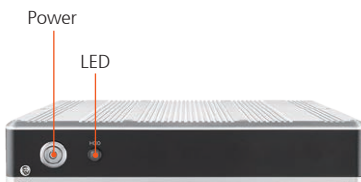
| Others                 |  |
|------------------------|--|
| Watchdog Timer         | Reset : 1 to 255 sec./min. per step  |
| Smart Management       | Wake on LAN, PXE supported   |
| HW Monitor             | Monitoring temperature, voltages. Auto throttling control when CPU overheats.  |
| Software Support       |  |
| OS                     | Windows 10, Windows 8.1, Windows 7, Linux  |
| Mechanical             |  |
| Dimensions (W x L x H) | (W) 250mm x (L) 180mm x (H) 44mm (9.8" x 7.1" x 1.7")  |
| Weight                 | 2.3 kg (5.07 lb)   |
| Mounting               | <ul style="list-style-type: none"> <li>▪ Wallmount by mounting bracket</li> <li>▪ VESA Mount</li> </ul>              |
| Environment            |  |
| Operating Temperature  | -30°C to 70°C (-22°F to 158°F)   |
| Storage Temperature    | -40°C to 85°C (-40°F to 185°F)   |
| Humidity               | 5% to 95% Humidity, non-condensing   |
| Relative Humidity      | 95% @ 70°C   |
| Shock                  | <ul style="list-style-type: none"> <li>▪ IEC 60068-2-27</li> <li>▪ SSD : 50G @ wallmount, Half-sine, 11ms</li> </ul> |
| Vibration              | <ul style="list-style-type: none"> <li>▪ IEC 60068-2-64</li> <li>▪ SSD : 5Grms, 5Hz to 500Hz, 3 Axis</li> </ul>      |
| EMC                    | CE, FCC, EN50155, EN50121-3-2  |

## Dimensions

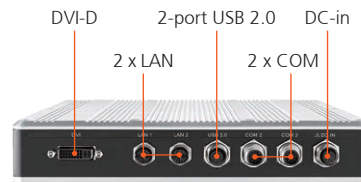
Unit : mm/ inch



## Front I/O



## Rear I/O



## Order Information

|                      |   |
|----------------------|---|
| <b>RES-1000-600U</b> | RES-1000, Intel® Core™ i7-6600U, 2 GigE LAN, 2 USB 2.0, 2 COM |
| <b>RES-1000-300U</b> | RES-1000, Intel® Core™ i5-6300U, 2 GigE LAN, 2 USB 2.0, 2 COM |
| <b>RES-1000-100U</b> | RES-1000, Intel® Core™ i3-6100U, 2 GigE LAN, 2 USB 2.0, 2 COM |
| <b>RES-1000-955U</b> | RES-1000, Intel® Celeron® 3955U, 2 GigE LAN, 2 USB 2.0, 2 COM |

## Accessories

|                                  |  |
|----------------------------------|--|
| <b>DDR4 16G</b>                  | Certified DDR4 16GB 2133MHz RAM                                      |
| <b>DDR4 8G</b>                   | Certified DDR4 8GB 2133MHz RAM                                       |
| <b>DDR4 4G</b>                   | Certified DDR4 4GB 2133MHz RAM                                       |
| <b>2.5" SATA HDD</b>             | Certified 2.5" SATA HDD  |
| <b>2.5" SATA SSD</b>             | Certified 2.5" SATA SSD  |
| <b>mSATA SSD</b>                 | Certified mSATA SSD  |
| <b>IP67 Rated DVI Cable</b>      | IP67 Rated DVI-D Cable, 200cm  |
| <b>IP67 Rated Ethernet Cable</b> | IP67 Rated M12 to RJ45 Ethernet Cable, 200cm                         |
| <b>IP67 Rated COM Cable</b>      | IP67 Rated M12 to COM Cable, 200cm                                   |
| <b>PWA-120W</b>                  | 120W, 24V, 90V AC to 264V AC Power Adapter with 3-pin Terminal Block |