



## Features

- 5" Resistive or Pcap Touchscreen
- Intel Apollo Lake J3455 Processor
- Widescreen 1920 x 1080 HD Display
- IP66 / IP69K and Optional IP67
- Optional 1000 nit Highbright Screen

## Technical Specifications

### Primary Components

Processor Family	Intel Celeron Apollo Lake
Processor Model	J3455 Quad Core
Processor Speed	1.5 GHz
Memory Type	1x DDR3L SO-DIMM
Memory Support	4GB, 8GB
Storage type	1x 2.5" SATA Drive Bay for SSD/HDD, M.2
Storage support	32GB-1TB

### Display

Screen Size	21.5"
Resolution	1920 x 1080 (Full HD)
Screen Ratio	16:9
Brightness	250 nits, Optional 1000 nit High Brightness
Contrast Ratio	1000:1
Viewing Angle	160° (H), 170° (V)

### Multimedia

Speakers	Optional Speakers
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### Thermal and Environmental

Operating Temperature	Array (32°F – 113°F)
Storage Temperature	Array (-4°F – 140°F)
Humidity Range	10% – 90% Non-condensing
Storage Humidity	10% – 90% Non-condensing
Cooling Solution	Passive – Fanless

**Touch Screen**

Touch Screen	5 Wire Resistive, Projected Capacitive
Light Transmission	Over 80% (Resistive), Over 90% (P-Cap)
Hardness	Resistive: 4H, P-cap: 7H

**Enclosure**

Material	SUS304 Stainless Steel, Optional SUS316 Stainless Steel
Ip Rating	IP66, IP69K, NEMA 4X, Optional IP67
Color	Stainless Steel
Control Buttons	Power Button
Mounting Options	Table Mount, VESA 100 Mount, Wall Mount
Approved Cleaning Solutions	Acetic Acid (low concentration), Ammonium Nitrate (low concentration), Benzine, Citric Acid (low concentration), Ethanol, Ethylene Glycol Solution (1:1 with water), Hexane, Hydrochloric Acid (low concentration), Iron Chloride Solution, Isooctane, Isopropyl Alcohol, Nitric Acid, Paraffin, Perhydrol (30% in water), Phosphoric Acid (low concentration), Propane, Silicone Oil, Sodium Carbonate (low concentration), Sodium Chloride Solution, Sodium Nitrate (low concentration), Sulfuric Acid (low concentration), Triethylene Glycol

**External I/O ports**

USB	2x M12 8Pin for USB 1/2 and USB 3/4
Serial / Com	2x M12 8-pin for COM
Serial Protocol Detail	1x RS-232, 1x RS-232/422/485
Ethernet / LAN	1x M12 8pin RJ45 Gbe LAN
Power Input Port	M12 type 5-PIN DC-in

**Power**

Input Voltage Range	9-32V DC
Max Power consumption	43W
Standard Power Adapter	AC 100~240V / 47 ~ 63Hz, IP68, 60W

**Peripherals & Wireless Connectivity**

WiFi	Optional WiFi + Bluetooth Flat Antenna Kit
BlueTooth	Optional Bluetooth 4.0
Barcode Scanner	Optional 1D/2D Barcode Scanner

**Dimensions / Weight**

Weight	12 KG (26.5 lbs)
Dimensions	557 x 58.5 x 348.5 mm (21.9 x 2.3 x 13.7 in)

### Operating Systems

Windows	Windows 10 IoT, Windows 10 Pro
Linux	Linux

### Certification

Certifications	CE, FCC, VCCI Class B
Certification Link	<a href="https://teguar.com/wp-content/uploads/2021/05/TS-4510-Series-Teguar-CE-Certification2070489R.pdf">https://teguar.com/wp-content/uploads/2021/05/TS-4510-Series-Teguar-CE-Certification2070489R.pdf</a>

### Compatibility

Security Hardware	Optional TPM 2.0
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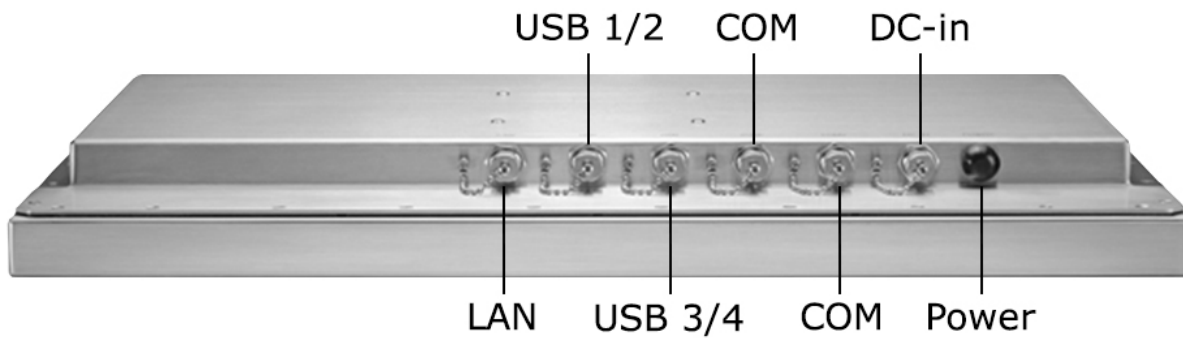
### Warranty

Warranty	Up to 5 Years
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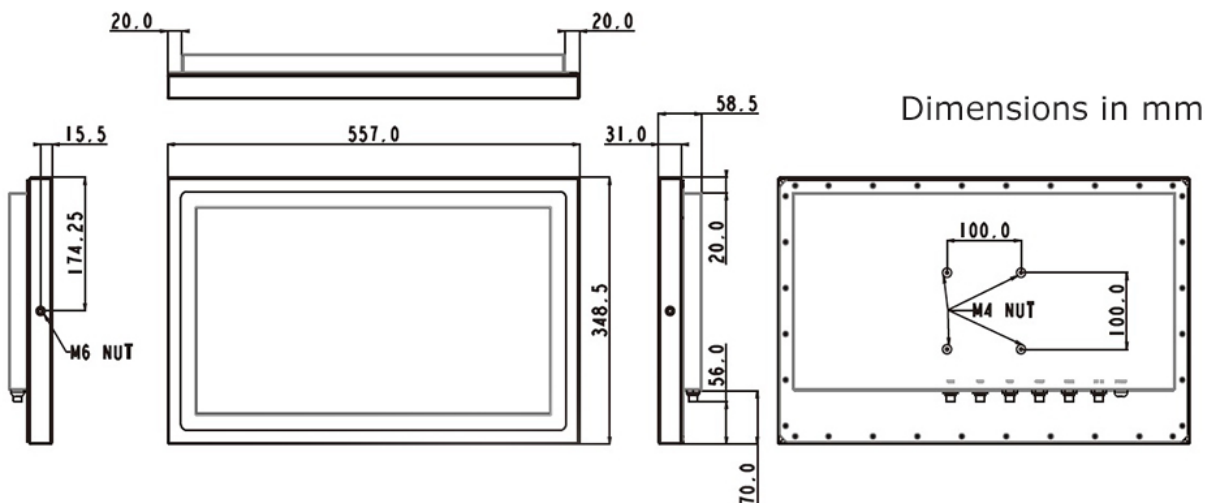
### Expansion Slots

Internal Mini PCIe	1x Mini-PCIe
Internal M.2	1x M.2 Type E

## Inputs / Outputs



## Technical Drawings



*All specifications are subject to change without notice.*