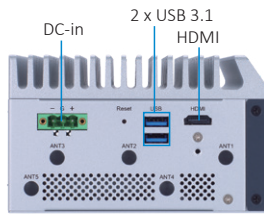
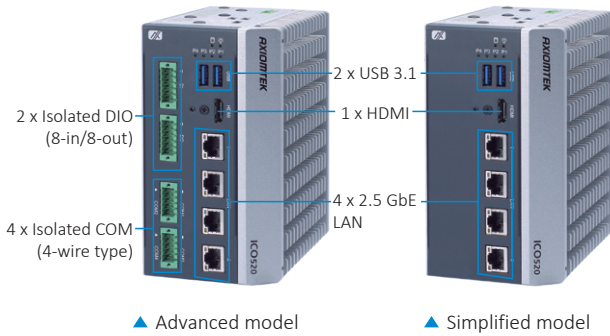


# IC0520

DIN-Rail Fanless Embedded System with 12th Gen Intel® Core™ i7/i5/i3 or Celeron® Processor, Four 2.5GbE LAN, 2 HDMI, 4 USB, 4 Isolated COM, and 2 Isolated DIO (8-in/8-out)



## Features

- High performance with fanless and DIN-rail design
- 12th gen Intel® Core™ i7/i5/i3 or Celeron® processor (Alder Lake-P)
- 4 isolated COM, 2 isolated DIO (8-in/8-out), and four 2.5 GbE LAN
- Wide operating temperature range from -40°C to +70°C
- 9 to 36 VDC input, typically 12 to 24 VDC, with OVP, UVP, OCP, RPP
- Supports TPM 2.0
- Supports cold boot at -40°C



## Specifications

Standard Color	Silver	
Construction	Extruded aluminum and heavy-duty steel, IP30	
CPU	Intel® Core™ i7-1265UE (1.7GHz/10C/15W) Intel® Core™ i5-1245UE (1.5GHz/10C/15W) Intel® Core™ i3-1215UE (1.2GHz/6C/15W) Intel® Celeron® 7305E (1GHz/5C/15W)	
Chipset	SoC integrated	
System Memory	1 x DDR4-3200 SO-DIMM, up to 32GB	
BIOS	AMI	
TPM	TPM 2.0	
System I/O Outlet	Serial	4 x Isolated RS-232/422/485 (4-wire, Phoenix-type connectors, only for advanced model) Isolation voltage: 2 kV
	Display	2 x HDMI (1920x1080 @60Hz)
	USB	4 x USB 3.1
	Ethernet	4 x RJ-45 isolated 2.5 GbE LAN (Intel® I226-IT) Isolation voltage: 1.5 kV
	DIO	2 x Isolated 8-in/8-out DIO (only for advanced model) Isolation voltage: 2 kV
	Others	5 x Antenna opening
Extension Interface	1 x M.2 Key B 3050/3052 slot: PCIe/USB (for 5G/Wi-Fi) 1 x Full-size Rev.1.2 PCI Express Mini Card slot: PCIe/USB (for LTE/Wi-Fi) 1 x Full-size Rev.1.2 PCI Express Mini Card slot: SATA/USB (for mSATA/Wi-Fi) 3 x SIM slot (1 for M.2 and 2 for full-size PCI Express Mini Card)	

## Specifications

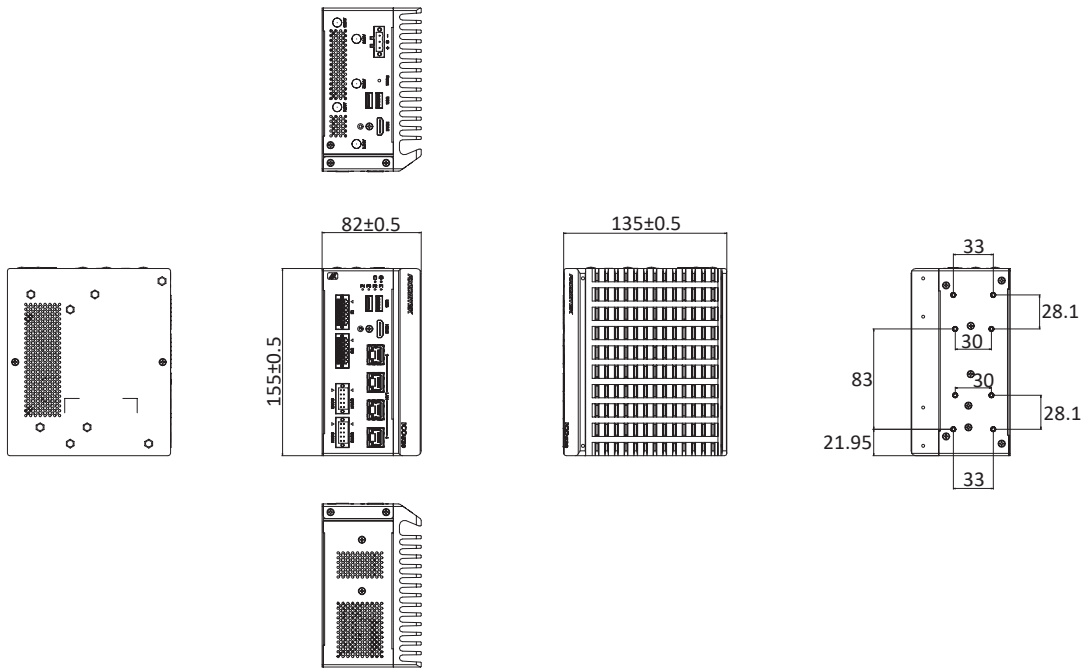
Storage	1 x Internal 2.5" SATA drive 1 x mSATA (occupying 1 x PCI Express Mini Card slot) 1 x M.2 (PCIe Gen2 x4): NVMe (2242/2280) (advanced model only)
Watchdog Timer	255 levels, 1 to 255 sec.
Power Supply	1 x Terminal block, accepts 9 to 36 VDC input, typically 12/24 VDC Power consumption: full loading - 54.82W (with 12VDC) - 56.52W (with 24VDC)  MTBF: 47,832 (hrs, @50°C)
System Indicators	1 x LED indicator for SATA drive 1 x LED indicator for power 4 x Programmable LED
Operating Temperature	Cold boot at -40°C  With fan kit: All systems support -40°C to +70°C (-40°F to +158°F)  Without fan kit: System with i7-1265UE or i5-1245UE supports -40°C to +50°C (-40°F to +122°F) System with i3-1215UE or 7305E supports -40°C to +60°C (-40°F to +140°F)
Humidity	10% to 95%
Vibration Endurance	2 Gms with storage (5 to 500Hz, X/Y/Z direction; random, operating)
Dimensions	83 mm (3.27") (W) x 110 mm (4.33") (D) x 155 mm (6.10") (H)
Weight (net/gross)	Advanced model: 1.75 kg (3.86 lb) Simplified model: 1.65 kg (3.84 lb)
Certifications	CE (Class A), FCC (Class A)
EMC	CE/FCC
EOS Support	Windows® 10 IoT, Linux
Software Support	eAPI

\* Wide Temperature. All W.T. supported products have to be sorted by Axiomtek.

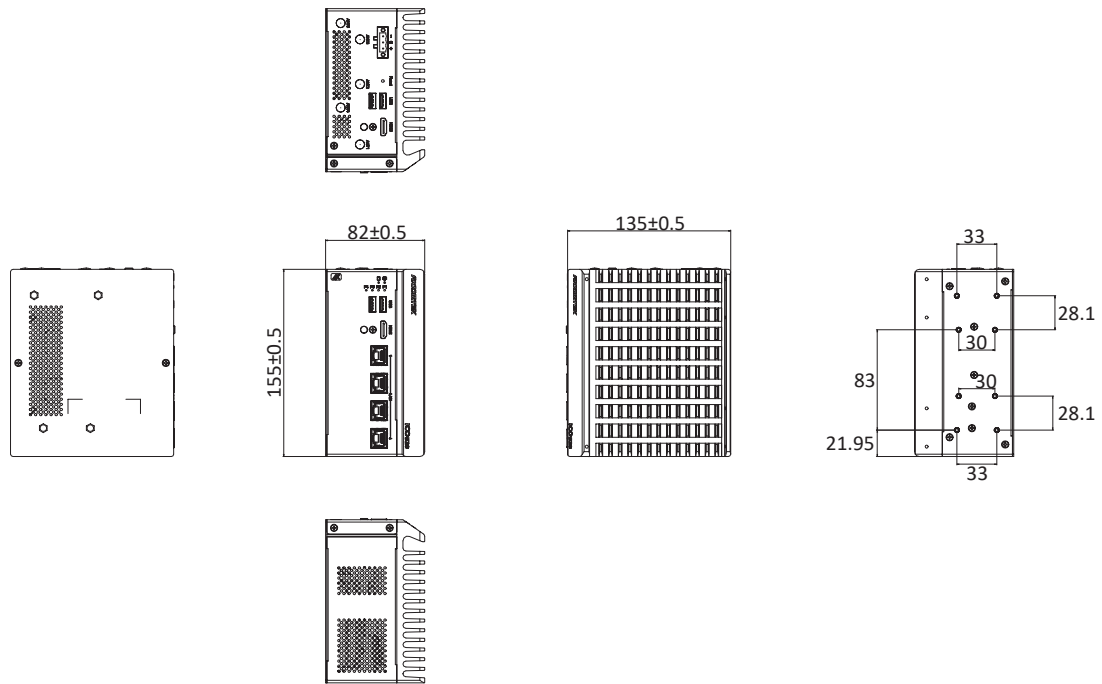
## Ordering Information

ICO520-ALD7-A	DIN-rail fanless embedded system with Intel® Core™ i7-1265UE processor, 4 USB 3.1, four 2.5GbE LAN, 4 isolated COM, 2 isolated DIO (8-in/8-out), and 2 HDMI
ICO520-ALD7-AS	DIN-rail fanless embedded system with Intel® Core™ i7-1265UE processor, 4 USB 3.1, four 2.5GbE LAN, and 2 HDMI
ICO520-ALD5-A	DIN-rail fanless embedded system with Intel® Core™ i5-1245UE processor, 4 USB 3.1, four 2.5GbE LAN, 4 isolated COM, 2 isolated DIO (8-in/8-out), and 2 HDMI
ICO520-ALD5-AS	DIN-rail fanless embedded system with Intel® Core™ i5-1245UE processor, 4 USB 3.1, four 2.5GbE LAN, and 2 HDMI
ICO520-ALD3-A	DIN-rail fanless embedded system with Intel® Core™ i3-1215UE processor, 4 USB 3.1, four 2.5GbE LAN, 4 isolated COM, 2 isolated DIO (8-in/8-out), and 2 HDMI
ICO520-ALD3-AS	DIN-rail fanless embedded system with Intel® Core™ i3-1215UE processor, 4 USB 3.1, four 2.5GbE LAN, and 2 HDMI
ICO520-ALDC-A	DIN-rail fanless embedded system with Intel® Celeron® 7305E processor, 4 USB 3.1, four 2.5GbE LAN, 4 isolated COM, 2 isolated DIO (8-in/8-out), and 2 HDMI
ICO520-ALDC-AS	DIN-rail fanless embedded system with Intel® Celeron® 7305E processor, 4 USB 3.1, four 2.5GbE LAN, and 2 HDMI

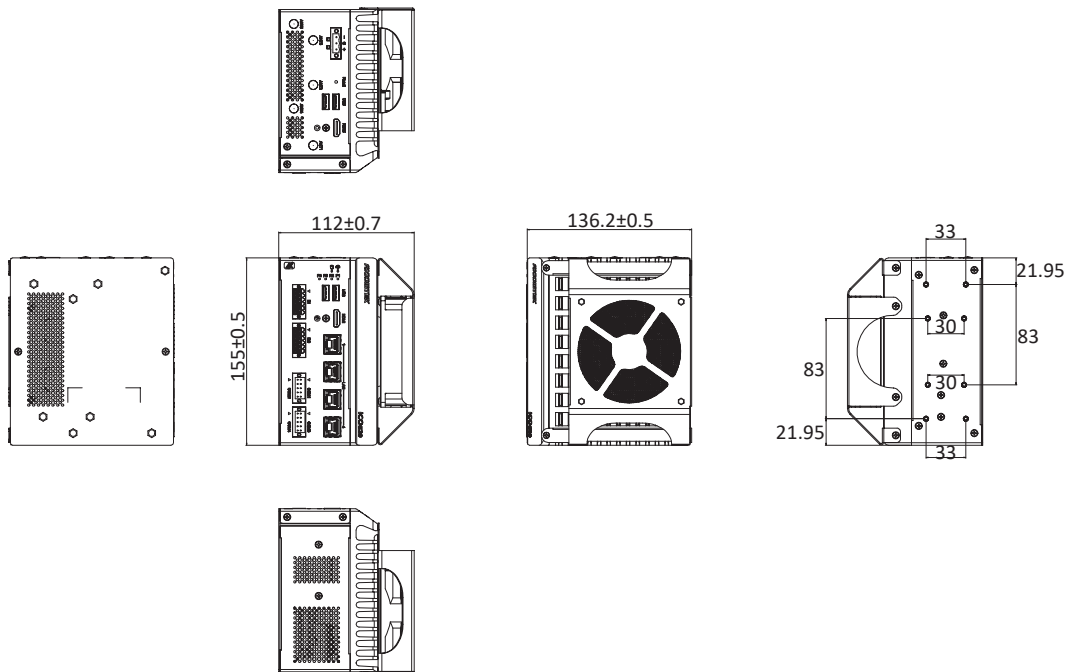
## Dimensions



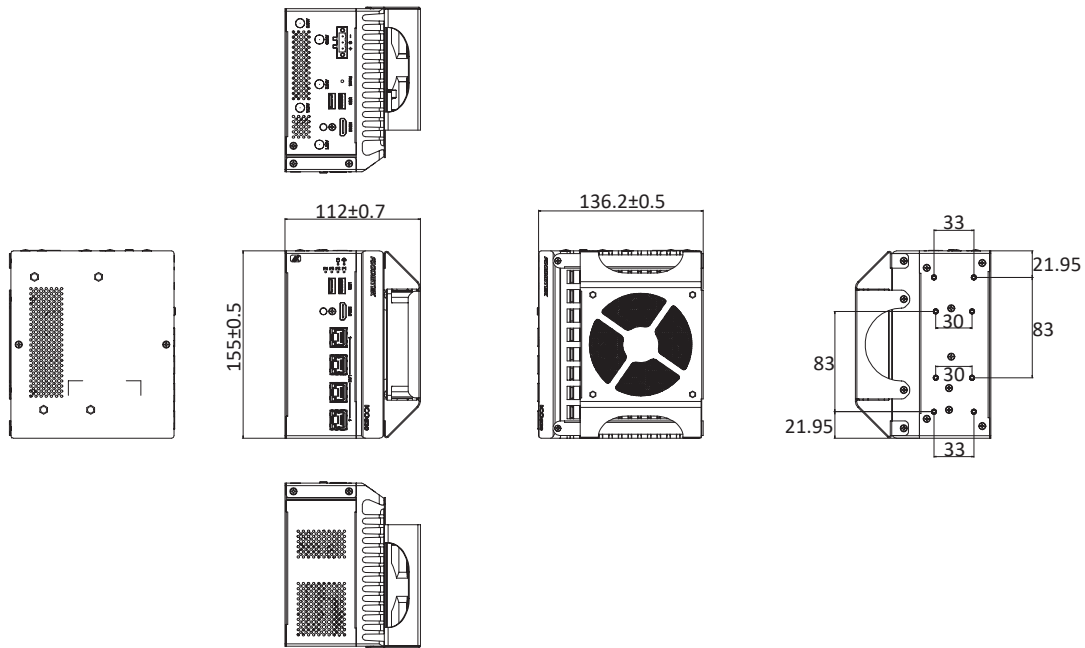
▲ Advanced model



▲ Simplified model



▲ Advanced model with fan



▲ Simplified model with fan