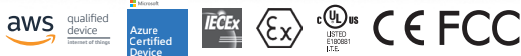


UNO-430 EXP

Waterproof Data Gateway with IP66 Rating and Explosion Protection

NEW



Features

- Intel® Atom™ E3950 quad-core processor with 8GB of DDR3L memory
- IP66 rating for protection from water and dust ingress
- Wide operating temperature range (-40 ~ 70 °C/-40 ~ 158 °F)
- Built-in TPM 2.0 for hardware-based security
- Reserve M.2 3042/3052 B Key, M.2 2230 E Key for Wifi, LTE & GPS expansion
- Easy maintenance and installation with front door and cable gland design
- C1D2, ATEX, and IECEx certification for explosion tolerance
- Microsoft Azure IoT Edge and Amazon AWS IoT Greengrass certified

Introduction

Designed for use in harsh industrial environments, UNO-430-E1H features all-around IP66-rated ingress protection and cable gland I/O connectors to provide a truly water and dust proof solution that can withstand the most demanding applications. The waterproof enclosure features a front door for easy access and maintenance as well as a cable gland that offers further ingress protection. This eliminates the need for a waterproof cabinet, cables, or wiring, which enables customers to use the UNO-430 gateway as a standalone data acquisition gateway. Moreover, with the provision of standard M.2 2230 Wi-Fi and M.2 3052/3042 5G/LTE sockets, the UNO-430 gateway offers expandable wireless connectivity for remote communication and data transfers. Furthermore, with C1D2, ATEX, and IECEx certification for explosion tolerance, UNO-430-E1H is ideal for applications in the oil & gas, mining, food & beverage, and chemicals & pharmaceuticals industries.

Specifications

General

- Certification** CE, FCC
UL Listed Class I, Division 2, Groups A, B, C, D
ATEX/IECEx Zone 2, Zone 22
Ex ec IIC T4 Gc
Ex tc IIIC T90°C Dc
- Dimensions (W x D x H)** 200 x 200 x 68 mm/7.87 x 7.87 x 2.67 in
- Form Factor** Square
- Enclosure** Aluminum housing
- Mount Options** Wall mount
- Weight (Net)** 3.7 kg/8.16 lb
- Power Requirement** 10 ~ 36 V_{dc}
- Power Consumption** 21W (typical), 27W (max.)
- OS Support** Microsoft® Windows 10 Ent. LTSC, Advantech Linux (Ubuntu 18.04)

System Hardware

- BIOS** AMI UEFI (64 Mbit)
- Watchdog Timer** Programmable timer with 255 intervals (1 ~ 255 sec)
- Hardware Security** TPM 2.0
- Processor** Intel® Atom® E3950 quad core, 1.6GHz (up to 2GHz)
- Memory** 8GB of DDR3L, 1600MHz
- Graphics Engine** Intel® HD Graphics 505
- Ethernet** Intel® i210-IT GbE, IEEE802.1AS, 802.3az
- LED Indicators** Power, Storage, LTE, Wi-Fi, Programmable LED
- Storage** 1 x M.2 2242 B-key (SATA signal)
- Communication** 1 x M.2 (E-key)(PCIe/USB2.0 signal) socket for 2230 Wi-Fi/Bluetooth module expansion
1 x M.2 (B-key)(USB2.0/USB3.0 signal) socket for 3042/3052 LTE/5G module expansion
1 x socket (USB signal) for MultiTech Dragonfly™ card
- Internal Maintenance Interface** 1 x USB 3.0, 1 x USB 2.0, 1 x DP

I/O Interface

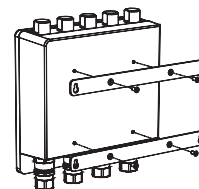
- Serial Ports*** 2 x RS-422/485, 50 ~ 115.2 kbps (terminal block with 2500V_{dc} isolation protection)
1 x RS-232, 50 ~ 115.2 kbps (terminal block, console port)
- LAN*** 2 x RJ45, 10/100/1000 Mbps IEEE 802.3u, 1000 BASE-T Fast Ethernet
- Power Connector*** 1 x 3-pin terminal block
- Cable Gland** 4 x 1/2" NPT conduit explosive atmosphere cable gland (cable size OD 6.55 ~ 14 mm/0.26 ~ 0.55 in)

Environment

- Operating Temperature** -40 ~ 70 °C/-40 ~ 158 °F @ 5 ~ 85% RH with 0.7 m/s airflow
- Storage Temperature** -40 ~ 85 °C/-40 ~ 185 °F
- Relative Humidity** 10 ~ 95% RH @ 40 °C/104 °F, non-condensing
- Shock Protection** Operating, IEC 60068-2-27, 50G, half sine, 11ms
- Vibration Protection** Operating, IEC 60068-2-64, 2Grms, random, 5 ~ 500Hz, 1hr/axis
- Ingress Protection** IP66 (IP65 for ATEX / IEC Ex)

Installation Scenario

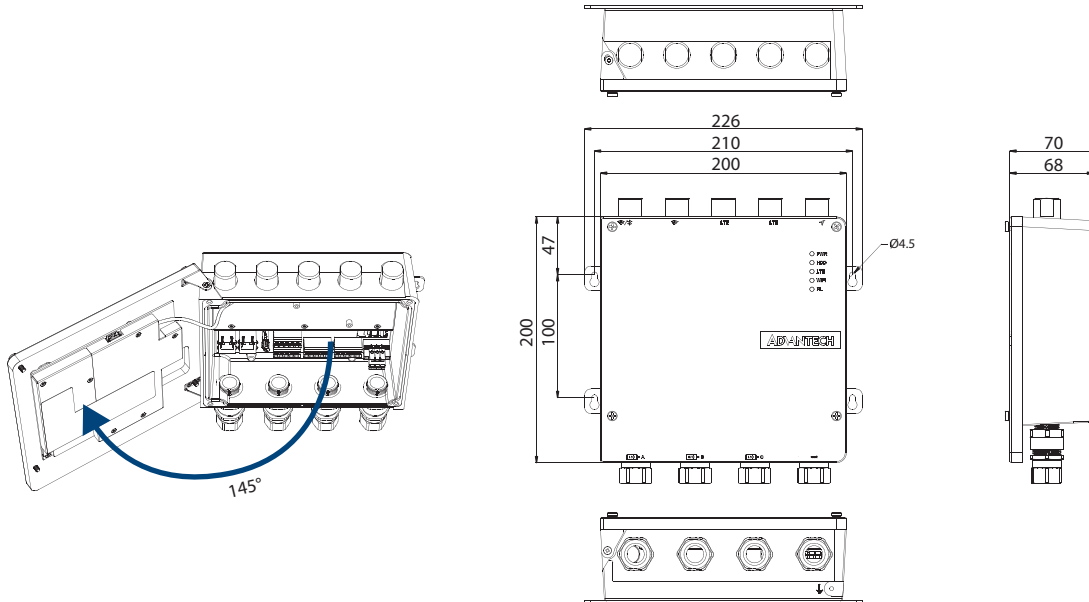
Wall Mount



* Four I/O cables can be connected simultaneously via the cable gland

Dimensions

Unit: mm



Ordering Information

- **UNO-430-E1H** Intel® Atom™ E3950, 2 GHz, processor with 8GB DDR3L memory, 4 x 1/2" NPT cable glands, and C1D2, ATEX, and IECEx certification

Embedded OS

- **20703WX9ES0035** Windows 10 IoT Enterprise LTSC x64 v6.05 B037
- **20703LEB1S0101** Image AdvLinuxTu V2.1.0 for UNO/TPC series

Optional Accessories

Stopping Plug (for unused cable gland)

- **1655006164-01** Stopping plug 1/2" NPT, IP67 rated

M.2 2242 SATA SSD

- **SQF-SM4M2-64G-SBE** 64GB M.2 SSD, SQFlash 640, SATA III (-40 ~ 85 °C/-40 ~ 185 °F)
- **SQF-SM4M2-128G-SBE** 128GB M.2 SSD, SQFlash 640, SATA III (-40 ~ 85 °C/-40 ~ 185 °F)
- **SQF-SM4M2-256G-SBE** 256GB M.2 SSD, SQFlash 640, SATA III (-40 ~ 85 °C/-40 ~ 185 °F)

Wi-Fi

- **EWM-W195M201E** M.2 2230 Wi-Fi module (802.11 a/b/g/n/ac with BT4.2) (-40 ~ 85 °C/-40 ~ 185 °F) with CE-RED compliance
- **1751000173-01*** Dipole antenna, 2.4/5G, N-jack/MHF4, 150 mm

*C1D2 use condition only

- **1751000431-01** Dipole 2.4G/5G N-jack, 255mm

*Antenna only (No cable)

LTE/GPS

- **968AD00426** Sierra EM7565 LTE Cat-12 M.2 module (global band)
- **968AD00590** Quectel EM06-E LTE Cat-6 M.2 module (EMEA/Brazil/APAC) with CE-RED compliance
- **1751000172-01*** LTE dipole antenna, N-jack/MHF4, 150 mm
- **1751000174-01*** GPS antenna, 1575 MHz, N-jack/MHF4, 150 mm

*C1D2 use condition only

AT&T/Verizon Certified LTE Kit for North America

- **C-PCM-24S24G-430-2** MultiTech LTE Cat.4 modem, antennas, for UNO-430-E1H

* For GPS Function, please order additional N-Jack/MHF1 antenna

- **1751000209-01*** GPS antenna, 1575 MHz, N-jack/MHF1, 150 mm

*C1D2 use condition only

Cable for Antenna

- **1751000228-01** Cable Ant. N-JACK/F MHF4/113 BLK L150mm

*The cable is applied to types of N-JACK/F MHF4 antenna

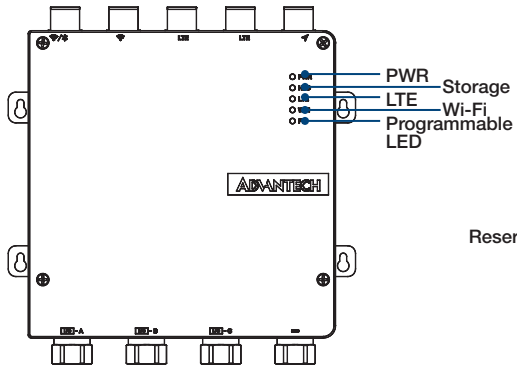
- **1751000430-01** Cable Ant. N-JACK/MMCX/113 BLK L150mm

*The cable is applied to types for N-JACK/F MMCX antenna

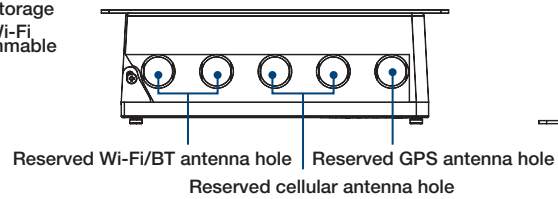
IP67 and NEMA 4X-Rated Power Supply

- **XDMS-TEX120-112** 96W 85 ~ 264VAC power supply (-40 ~ 85 °C/-40 ~ 185°F) (C1D2 and ATEX certified)
- **1700031021-01** DC cable with TEX 120-112 connector, 2M
- **1700031022-01** AC cable with TEX 120-112 connector, 2M (EU)
- **1700031024-01** AC cable with TEX 120-112 connector, 15M (EU)
- **1700031023-01** AC cable with TEX 120-112 connector, 2M (US)
- **1700031025-01** AC cable with TEX 120-112 connector, 15M (US)

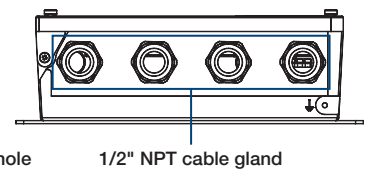
Front LED



Top I/O



Rear I/O



Internal I/O

