ECU-150

NXP i.MX8M Quad Core Cortex A53 **High-Performance IoT Gateway** with 2 x LAN. 2 x COM. 1 x USB



Features

- NXP i.MX8M Quad Core Cortex A53 1.3G CPU
- DDR4 2GB RAM, 16GB eMMC for system storage
- 2 x RS-232/485 isolated serial ports
- 2 x 10/100/1000 Ethernet ports
- 1 x Mini-PCle for WIFI/Cellular/4G
- Support web service for remotely on-line monitoring
- Support SD card & on-line firmware update
- Support Modbus, IEC-60870-101/104 protocol
- Support Data logger on SD card
- Operation Temperature -40~70°C

Introduction

ECU-150 is an i.MX8M based high-performance IoT gateway, which has an open platform design with Quad Core processor, two RS-232/485 isolated serial ports, two 10/100/1000 Ethernet ports, one USB 3.0 port and operating temperature range of -40-70°C. It offers Mini-PCle and M.2 slot for integrating Wi-Fi/4G/5G modules. With Linux operating system and EdgeLink configure tool, ECU-150 enable system integrators to develop applications precisely for solar power, electricity and factory, which require massive data collection, cloud based application and video related monitoring solutions.

Specifications

General

•	Certi	ficatio	n

- Mounting
- Power consumption
- Power Requirements

System

- CPU
- Memory
- Indicators
- Storage
- SD Slot
- . Dispaly
- Watchdog
- SIM Slot RTC
- Security
- FRAM

Communication

- Serial Port
- Isolation
- Ethernet Port
- **USB** Port
- Expansion

Software

OS Support

Protocol Support*

Yocto Kernel 4.14/Ubuntu 20.04 DNP3.0 Client & Server, OPC-UA Client & Server, BACNet/IP Client & Server, Modbus RTU/TCP Master & Slave, IEC-60870-5-101 Master, IEC-60870-5-103 Master, IEC-60870-5-104 Master & Slave

*Please refer to EdgeLink Protocol & Driver Support List for details

AD\ANTECH Environment & Energy Solution

All product specifications are subject to change without notice.

- PLC driver support
- **Programming Support**
- Configuration Tool
- Data Monitoring

Environment

- - 5~95% (non-condensing)

Ordering Information

- ECU-150-12A
- i.MX8M Quad Core Industrial Communication Gateway with 2 x LAN, 2 x COM, 1 x USB 2nd stack expansion module support 1 x M.2

200+ PLC drivers

- 2nd stack expansion module support 2 x mPCIE
- 2nd stack expansion module support 1 x iDOOR

Wi-Fi Solution

802.11ac/a/b/g/n 2T2R Wi-fi + Bluetooth 4.2 Half 1750008717-01 WiFi 2.4GHz+5GHz dipole antenna Wi-Fi Coaxial Cable, 150 mm 1750006043 9656EWMG00E Half-size miniPCle to miniPCle bracket set

Cellular Solution (SIM card is not included)

- 96PD-EC25EFA LTE Cat 4 Module with GNSS 1750006264 SMA(F) Cable, 15 cm Antenna AN0727-64SP6BSM 1750008303-01 96PD-MDG200AU0
- 1750006264
- 1750008303-01

AMIC 4G.Cat4 Socket Modem(US) SMA(F) Cable, 15 cm Antenna AN0727-64SP6BSM

IEC-61131-3, Linux C, Phython WISE-EdgeLink Studio 20000 Tags Max.

Siemens/Mitsubishi/Omron/Allen-Bradley, Delta etc

- **Operating Temperature** -40~70°C
- Storage Temperature -40~85°C
- Humidity

NXP i.MX8M Quad Core Cortex A53 1.3G LPDDR4 2GB LEDs for Power, LAN (LINK, ACT), Serial (Tx, Rx), Programmable

Wall-Mount/ DIN-Rail

CE, FCC

8W @ 24V_{DC}

 $10 \sim 30 V_{DC}$

- 16GB eMMC for OS
- 1 x Micro-SD slot
 - 1 x HDMI resolution 1280 x 720 (Optional) Yes
 - 1 x Nano SIM slot
 - Yes
 - TPM2.0 (Optional) 128KB (Optional)
- 2 x RS-232/485, 50 ~ 115200 bps
- 2500 Vpc
- 2 x 10/100/1000 RJ-45 ports
- 1 x USB3.0 Interface: 1x Mini-PCIe (Full-size)
- Type: WIFI/Cellular/4G

Signal: USB 2.0/PCIe (Optional)

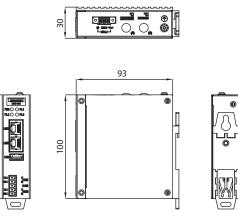
- ECU-150P-M1A ECU-150P-P2A ECU-150P-D1A

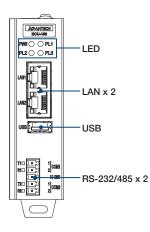
 - EWM-W172H01E

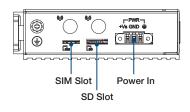
Dimensions

Front View

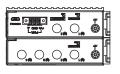
Top View



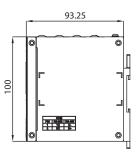


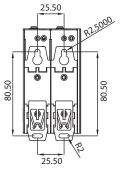


Dimensions with 2nd Stack









5G Module Supported

Manufacturer	Model
Quectel	RM500Q-GL
Quectel	RM502Q-AE (North America)
Unicom	CU-QM1
Fibocom	FM-150-AE
Gosuncn	GM800

iDoor Module Supported

- PCM-24D2R2-BEPCM-24D2R4-BE
- Isolated RS-232, DB9 x 2, (USB type)
 - Isolated RS-422/485, DB9 x 2, (USB type)
- PCM-24D4R4-BEPCM-26D2CA-AE
- Non-Isolated RS-422/485, DB37 x 1 (USB Type)
- SJA1000 CANBus, CANOpen, DB9 x 2