

M357-AI Industrial 5G Edge AI Gateway



Introduction

Proscend M357-AI is an Industrial 5G Edge AI Gateway with embedded 5G NR and Edge AI acceleration capabilities. By leveraging the pre-trained AI data models, the M357-AI features the highly integrated, secure, real-time, top performing IIoT device empowering AI inference at the nearest end of fields where vast field data must be collected, learned, and processed locally.

The 5G NR of M357-AI enables reliable, secure broadband communications and accelerates the speed up to 2.5Gbps as a perfect rival wireless solution exceeding most of the existing fixed-line networks, it strengthens the Quality-of-Service and encrypts the critical data from the AI process, before carrying the data over public or private 5G networks.

The M357-AI allows third-party developers and users to develop tailor-made functions on top of either OpenWRT platform or Docker Engine supported by the M357-AI. The highly integrated hardware platform consisting of a 7nm Quad-core ARM CPU, packet engine, 5G radio, GPU, extended memory storage, and peripheral interfaces features the unparalleled advantages of high computing power, low power consumption, and compact size for solution integrators to maximize their values in the areas of transportation, surveillance, smart manufacturing, and more.

Features

- Support multiple band connectivity with 5G NR / FDD LTE / TDD LTE
- CPU Quad ARM[®] Cortex-A55 operating up to 2.0GHz
- Extended memory storage of up to 512GB
- GPU embedded for AI computing
- AI trained model updates over the cloud
- Support 3rd-party Apps on OpenWRT and Docker Engine
- Subscription-based Cyber Security
- Failover between dual SIM and 2.5G WAN for network resilience
- Secure VPN connections and encryption
- Industrial design for operation in harsh environments

& PROSCEND

Specifications

Cellular Interface Power Supply ■ 5G: NR FDD/TDD ■ Terminal block power Input: 10 ~24 VDC 4G: LTE FDD/TDD ■ DC Jack power Input: 12 VDC, 2A 3G: UMTS FDD Power Consumption: 20 (Max) Hardware interface Software 1 x 2.5G WAN port compliant with 802.3bz ■ IPv4, IPv6, DHCP server and client, Static IP, SNTP ■ 4 x 1000Baste-T LAN ports compliant with 802.3ab ■ NAT, Virtual Server, Static Routing 2 x SIM slots VPN: OpenVPN Web GUI with HTTPS 1 x Micro SD slot 1 x RS-232 (TXD/R/GND) Dual Image 1 x RS-485 (D+/D-/GND, Non-Isolated) Syslog monitor ■ 1 x DI (Non-Isolated), 1 x DO (Non-Isolated) SSH v2 ■ 5 x SMA connectors for detachable 5G/LTE/GPS(Passive) Environment Antenna ■ Operating Temperature -30 ~ +60°C **Physical Characteristics** ■ Storage Temperature -40 ~ +85°C

- Enclosure : Metal Case
- Dimensions (W x H x D) : 138.9 x 38 x 131 mm
- Weight: 715g
- Installation : Wall mounting, DIN-rail mounting, desktop.

LED Display

- System operation, user defined indicator
- SIM card presence, cellular signal strengths
- Ethernet WAN/LAN link and speed

Dimensions







Humidity

Standards and Certifications

NCC & BSMI CNS15936 & CNS15598-1



■ Ambient Relative Humidity 10 ~ 95% (non-condensing)

0~95% (non-condensing)

Ordering Information

Model Name	Description
M357-Al Indu	dustrial 5G Edge AI Gateway

NOTE: Features and specifications are subject to change without prior notice.