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**Connecting Possibilities, Weaving Futures** 

## Meerkat

## **An Edge IIoT Gateway**



Our Edge IIoT Gateway **Meerkat.** We redesign & reimagine IIoT so that you remain the same!

## PRODUCT FEATURES (OPERATING CONDITIONS: 24VDC/VAC, -20 DEG. TO 85 DEG. CELSIUS)

| Processor            |
|----------------------|
| & System             |
| <b>Configuration</b> |

• CPU: ESP32-S3 (FCC, CE Certified)

• Flash Memory: 8 MB

• RAM: 8 MB

Serial Ports

- RS-485 (3.75 kV Isolation)
- RS-232 (3 kV Isolation)
- CAN 2.0 (2 kV Isolation)
- Ethernet (10/100 Mbps) with IT-OT Isolation
- USB-Type C (Firmware Upgrade)
- USB 2.0 Type A FS OTG (500mA output)
- Open Drain Optically Isolated Digital Inputs with 3.75 kV Isolation (GPIO)
- Open Drain Optically Isolated Digital Outputs (GPIO)
- On-board SD Card for local data store

Wireless Radio

- WIFI (802.11 b/g/n/LR WIFI Radio)
- BLE (BLE 5.0 Radio)
- Cellular (2 SIM Card Slot with 2G/3G/4G LTE via mPCle card)

Software & OS

- OS freeRTOS
- Protocol Support & pre-compiled libs for MQTTs (Secure MQTT), HTTPs, Modbus RTU/TCP, BACnet IP & BACnet MSTP, OPC-UA, DLMS-COSEM, CAN & CANopen, OCPP & Ethernet IP (In Development)
- Secure Remote Over the Air Update (OTA) for Firmware Upgrades
- Web UI on-board for config. settings & LUA scripting enabled

## Security

- Secure Boot Enabled
- Encrypted executable code with device specific random key for code protection at rest
- Data Encryption with device specific key
- Encrypted key store protected against unauthorized read, including side loading of firmware with support for TLS 1.2/1.3