

TCU800-Micro • Controller • Gateway • Aggregator

KEEP YOUR CRITICAL OPERATIONS RUNNING EFFICIENTLY

TCU800-Micro Capabilities

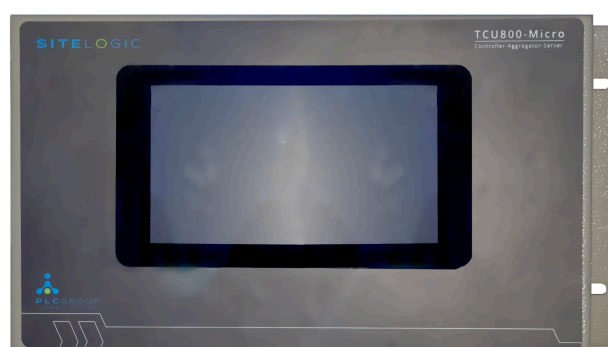
TCU800-Micro is designed to enable efficient remote monitoring and control for critical infrastructure like Telecom sites, Cable Landing Stations, and Edge Data Centers. Some of the capabilities of TCU800-Micro Universal Controllers are:

- Free Air Cooling, Single HVAC (legacy) Control
- Slim design to fit in outdoor Telecom Cabinets
- Ideal for HVAC control, Generator, fuel monitoring, and block heater management.
- Supports SNMP, Modbus, MQTT, UDP, LTE, optional Wi-Fi, and cloud integration.

PLC Group's Remote Monitoring and Control Hardware Portfolio

PLC Group offers an extensive portfolio of fixed and modular controllers, IoT gateways, and sensors for remote visibility and control of critical infrastructure elements. PLC Group's range of products includes various gateways and controllers with diverse combinations of IP ports, mounting types, displays, edge computing capabilities, and other features.

PLC Group's products are vendor-neutral and seamlessly integrate with existing infrastructure elements such as DC plant batteries, generators, HVAC systems, tower lights, and more. With this integration, users can monitor and control these elements over 5G/4G/3G Wi-Fi, Ethernet, and using protocols such as Modbus, CAN bus, UDP and SNMP.



TCU800-Micro Features

Processing & Memory

| | |
|-------------------------|--|
| Processor | ARM Cortex-A72 clocked |
| Processing Speed | 1.8 GHz |
| RAM | 4 GB LPDDR4 |
| Storage Space | 8 GB (expandable up to 16/32 GB) |
| Operating System | Linux Distribution: Debian (Version: Buster) |
| Storage | Flash |

Power Requirements

| | |
|----------------------------------|------------------|
| Input Voltage | 18 VDC to 60 VDC |
| Nominal Power Consumption | 12 W |
| Fuse/Breaker Rating | 5 Amp |
| Operating Temperature | -20°C to 55°C |

Interfaces & Ports

| | |
|------------------------------|---|
| RS-485 Ports | 2 |
| USB Interfaces | 4 |
| Universal Inputs | 11 (0-5V, 0-10V, 4-20mA, Dry Contact, Temperature, Pulse Count) |
| Analog Outputs | 3 (0-10VDC) |
| Digital Output Relays | 7 (NC/NO 1A @120VAC) |
| RJ45 IP Ports | 1x 10/100/1000M IP/Ethernet Port |

Networking and Connectivity

| | |
|--|--|
| Communication Protocols | SNMP v1, v2c, v3, Modbus RTU/TCP, TCP/UDP, SMTP, HTTP/HTTPS, MQTT, NTP, Telnet, ICMP, SSH, DHCP, DNS |
| Single SIM LTE Modem (2G, 3G, 4G) | Yes |
| WiFi | Wi-Fi (IEEE 802.11 b/g/n) (optional) |
| Wi-Fi Hotspot | Optional |

Software Features

Security Features Password, SSL, SNMP v3, Radius, VPN

Remote Software & Firmware Upgrades Yes

Remote VPN Access

- Wire Guard
- VPN

Cloud Integration Yes

Physical Features

Enclosure Metallic Body

Mounting Wall Mount

Shipping Weight 1.9 kg / 4.18 lb

Dimensions (HxWxD) mm / in (185x 320 x 65) mm / (7.3 x 13 x 2.6) in

HMI (Human Machine Interface) 7-Inch Touch Screen Display

Unit LEDs

- Power
- Status
- Alarm

Hardware Control Examples

Single HVAC Thermostat Control Yes

Fuel Monitoring Yes

Generator Control (Legacy/Smart) Yes

Block Heater Monitoring and Control Yes

Integration with Smart Elements over Modbus/SNMP Yes

TCU800-Micro Physical Dimensions

