

## TCU-MiniT+ • Controller • Gateway • Aggregator

KEEP YOUR CRITICAL OPERATIONS RUNNING EFFICIENTLY

### TCU-MiniT+ Capabilities

TCU-MiniT+ 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 TCU-MiniT+ Universal Controllers are:

- Free Air Cooling and Single HVAC (legacy) Control.
- Ideal for HVAC control, Generator, fuel monitoring, and block heater management.
- Supports SNMP, Modbus, MQTT, UDP, LTE, optional Wi-Fi, and cloud integration.
- 32 port Alarm Expansion Module for alarms monitoring

### 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 4G/3G Wi-Fi, Ethernet, and using protocols such as Modbus, CAN bus, UDP and SNMP.



## TCU-MiniT+ Features

### Processing & Memory

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

### Power Requirements

<b>Input Voltage</b>	18 VDC to 60 VDC
<b>Nominal Power Consumption</b>	14 W
<b>Fuse/Breaker Rating</b>	5 Amp
<b>Operating Temperature</b>	-20°C to 55°C

### Interfaces & Ports

<b>RS-485 Ports</b>	2
<b>USB Interfaces</b>	4
<b>Universal Inputs</b>	11+22 = 33 (0-5V, 0-10V, 4-20mA, Dry Contact, Temperature, Pulse Count)
<b>Analog Outputs</b>	3 (0-10VDC)
<b>Digital Output Relays</b>	7 (1A @120VAC)
<b>RJ45 IP Ports</b>	1x 10/100/1000M IP/Ethernet Port

### Networking and Connectivity

<b>Communication Protocols</b>	SNMP v1, v2c, v3, Modbus RTU/TCP, TCP/UDP, SMTP, HTTP/HTTPS, MQTT, NTP, Telnet, ICMP, SSH, DHCP, DNS
<b>WiFi</b>	Wi-Fi (IEEE 802.11 b/g/n) (optional)
<b>Wi-Fi Hotspot</b>	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** PVC Plastic Body with Metal Hinges

**Mounting** Wall Mount

**Shipping Weight** 3.6 kg / 7.93 lbs

**Dimensions (HxWxD)  
mm / in** (389 x 280 x 140) mm / (15.3 x 11.02 x 5.5) in

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

**Unit LEDs**

- Power
- Status
- Alarm

## Hardware Control Examples

**Single HVAC Thermostat Control** Yes

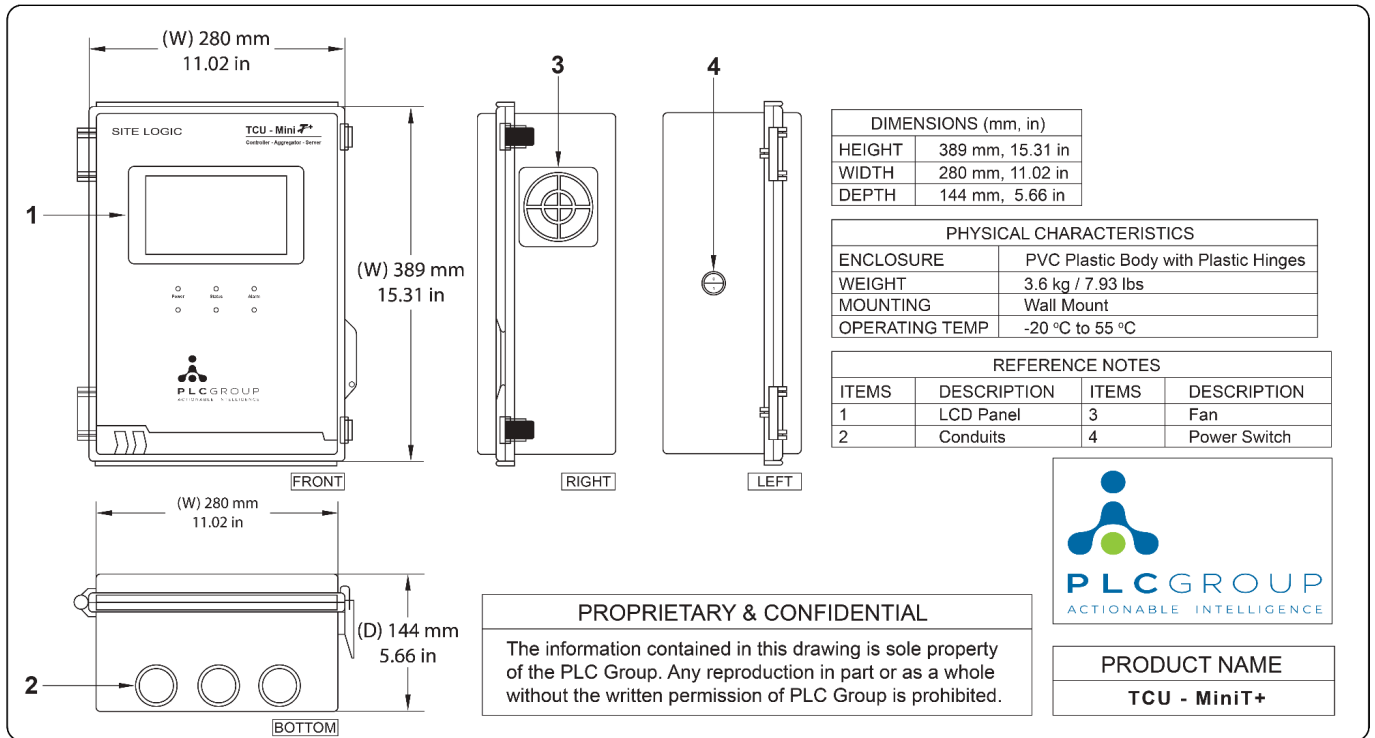
**Fuel Monitoring** Yes

**Generator Control (Legacy/Smart)** Yes

**Block Heater Monitoring and Control** Yes

**Integration with Smart Elements over Modbus/SNMP** Yes

# TCU-MiniT+ Physical Dimensions



DIMENSIONS (mm, in)	
HEIGHT	389 mm, 15.31 in
WIDTH	280 mm, 11.02 in
DEPTH	144 mm, 5.66 in

PHYSICAL CHARACTERISTICS	
ENCLOSURE	PVC Plastic Body with Plastic Hinges
WEIGHT	3.6 kg / 7.93 lbs
MOUNTING	Wall Mount
OPERATING TEMP	-20 °C to 55 °C

REFERENCE NOTES			
ITEMS	DESCRIPTION	ITEMS	DESCRIPTION
1	LCD Panel	3	Fan
2	Conduits	4	Power Switch

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**PRODUCT NAME**  
**TCU - MiniT+**