

TCU-NG2 • Controller • Gateway • Aggregator

KEEP YOUR CRITICAL OPERATIONS RUNNING EFFICIENTLY

TCU-NG2 Capabilities

TCU-NG2 is PLC Group's Flagship Controller that offers a one-stop solution for monitoring and control needs for ICT infrastructure like Telecom (RBS) sites, Cable Landing Stations, and Edge Data Centers. Some of the capabilities of TCU-NG2 Universal Controllers are:

- Controller for real-time monitoring and control of various applications, Free Air Cooling, HVAC's (Single and Dual), with lead lag control in any combination of smart and legacy HVAC's.
- Remote Monitoring and control of Generator, Fuel, Battery, DC Plants, Block Heater etc.
- Integration with intelligent elements (DC Plant, Generator, Batteries, ATS, Energy Meters, Solar System) via Modbus (RTU/TCP), UDP & SNMP.
- Edge Computing & Edge Control functionality.
- LTE and IP Backhaul.

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.



TCU-NG2 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	<ul style="list-style-type: none">■ 18 to 60 VDC■ 90 to 240VAC (Requires Optional Adapter)
Nominal Power Consumption	15W
Fuse/Breaker Rating	5 Amp
Operating Temperature	-20°C to 55°C

Interfaces & Ports

RS-232 Ports	2
RS-485 Ports	4
CAN Ports	1
USB Interfaces	2
Universal Inputs	16 (0-5V, 0-10V, 4-20mA, Dry Contact, Temperature, Pulse Count)
Analog Outputs	4
Digital Output Relays	6
RJ45 IP Ports	8 x 10/100 Mbps IP/Ethernet Ports

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	Optional

(3G, 4G, 5G)

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 PVC Plastic Body with Plastic Hinges

Mounting Wall Mount

Shipping Weight 3.9 kg / 8.59 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

Control Options, Single/Dual HVAC Thermostat Control Yes

Generator Control (Legacy & Fuel Monitoring) Yes* (If Single HVAC)

Block Heater Monitoring and Control Yes* (If Single HVAC)

TCU-NG2 Physical Dimensions

