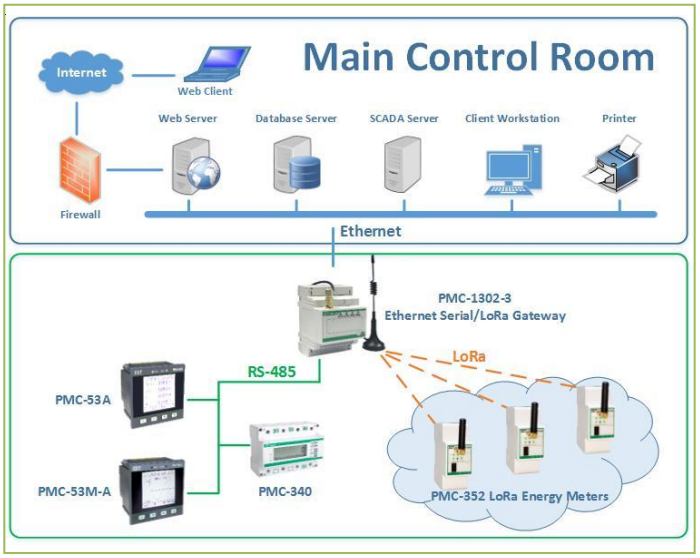
CET Electric Technology

PMC-1302-3
Ethernet Serial/LoRa Gateway

Typical Application Diagram



Overview

The PMC-1302-3 ESG is an Ethernet Serial/LoRa Gateway which provides one 10/100BaseT Ethernet port, two RS-485 ports and an optional wireless LoRa port with configurable ISM Bands. It is the ideal equipment for connecting RS-485 and optionally LoRa enabled devices to an IP-based Ethernet LAN, making it possible to access serial and optionally LoRa devices over your Ethernet network for any SCADA or Automation applications. The PMC-1302-3 ESG has been specifically designed with industrial automation in mind and therefore provides un-surpassed performance and reliability under the harshest industrial or commercial environments.

Features

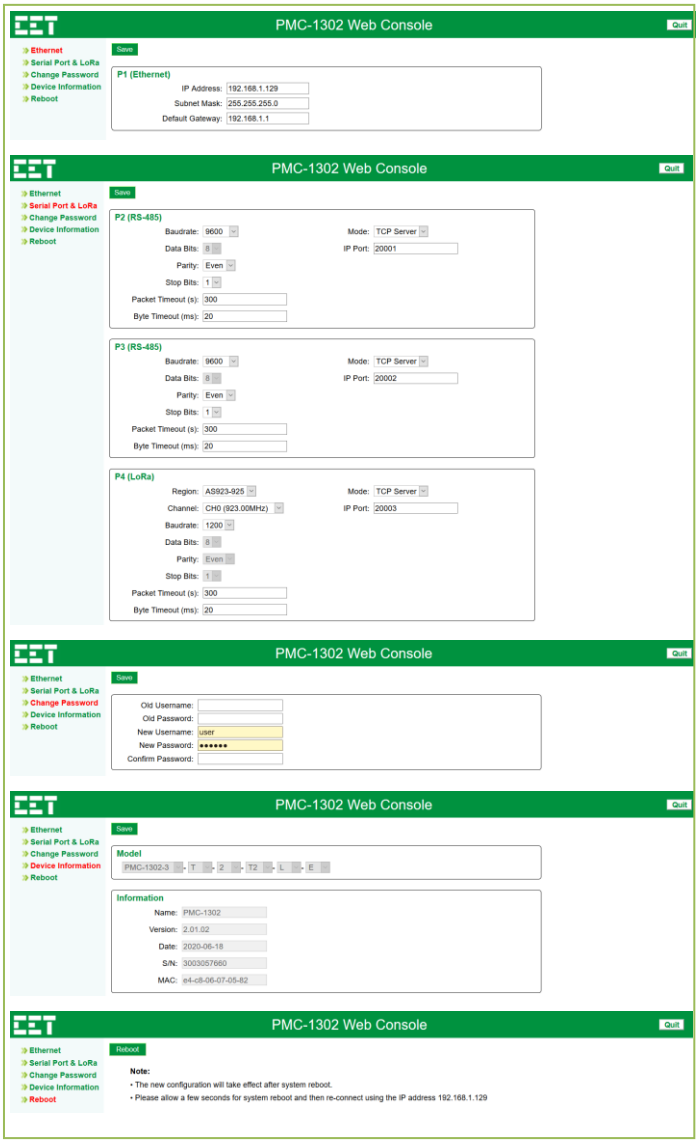
- 1x10/100BaseT
- 2xRS-485 ports
- Optional LoRa port with configurable ISM Bands for EU863-870, RU864-870, IN865-867, US902-928, AU915-928, AS920-923 and AS923-925
- 8kV ESD protection
- 1.5kV isolation protection for Ethernet port
- 3kV isolation protection for RS-485
- One-key Reset to default factory
- Simple configuration via its built-in web interface
- DIN Rail Mounting
- Extended operating temperature

Applications

The PMC-1302-3 ESG supports the efficient transfer of serial packets between the upstream network-based applications and the downstream RS-485 serial and optionally LoRa wireless devices via a TCP/IP connection. Instead of using a Windows based "Virtual COM" driver with a port-mapping utility, which is often plagued with driver incompatibility among the many different Windows versions, the PMC-1302-3 ESG allows applications to directly connect to it via a TCP/IP connection for the transfer of serial packets inside TCP/IP frames to and from downstream devices. Perfectly suited for communicating with industrial devices that have timing sensitive protocols, the PMC-1302-3 ESG provides a reliable interface which allows SCADA or similar applications that already support direct connection with Ethernet Gateway to communicate with downstream devices independent of the serial protocol used.

The PMC-1302-3 ESG optionally supports the LoRa port with configurable ISM Bands for wireless IoT applications in most countries.

Web Interfaces



Designed For Reliability **Manufactured To Last**

CET Electric Technology

PMC-1302-3
Ethernet Serial/LoRa Gateway

Standard of Compliance

Safety Requirements	
Insulation	EN61010-1: 2010 EN61010-2-030: 2010
Dielectric Test	2kV @ 1 minute
Insulation Resistance	>100MΩ
Impulse Voltage	5kV, 1.2/50μs
Electromagnetic Compatibility CE EMC Directive 2014 / 30 / EU (EN 61326: 2013)	
Electrostatic Discharge	EN 61000-4-2: 2009
Radiated Fields	EN 61000-4-3: 2006+A1: 2008+A2: 2010
Fast Transients	EN 61000-4-4: 2012
Surges	EN 61000-4-5: 2014+A1: 2017
Conducted Disturbances	EN 61000-4-6: 2014
Magnetic Fields	EN 61000-4-8: 2010
Voltage Dips and Interruptions	EN 61000-4-11: 2004+A1: 2017
Emission Tests	
Limits and Methods of Measurement of Electromagnetic Disturbance Characteristics of Industrial, Scientific and Medical (ISM) Radio-Frequency Equipment	EN 55011: 2016
Electromagnetic Compatibility of Multimedia Equipment - Emission Requirements	EN 55032: 2015
Limits for Harmonic Current Emissions for Equipment with Rated Current ≤16 A	EN 61000-3-2: 2014
Limitation Of Voltage Fluctuations And Flicker In Low-Voltage Supply Systems For Equipment With Rated Current ≤16 A	EN 61000-3-3: 2013
Emission Standard for Residential, Commercial and Light-Industrial Environments	EN 61000-6-4: 2007+A1: 2011
Mechanical Tests	
Spring Hammer Test	IEC 62052-11: 2003
Vibration Test	IEC 62052-11: 2003
Shock Test	IEC 62052-11: 2003

Ordering Information

CET Electric Technology — *Version 20200611*

Product Code	Description
PMC-1302-3 Ethernet Serial/LoRa Gateway	
Basic Function	
T	Transparent Transmission
Power Supply	
2	95-250 VAC/DC, 47-440Hz
Wire Communication	
T2	1x10/100BaseT, RJ45 connector and 2xRS-485
Wireless Communication	
N	None
7*	LoRa (860-935 MHz) configurable for EU863-870, RU864-870, IN865-867, US902-928, AU915-928, AS920-923 and AS923-925
Language	
E	English

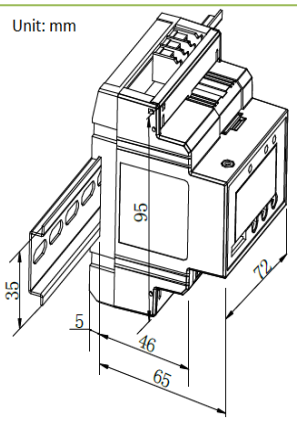
PMC-1302-3 - T 2 T2 N E — PMC-1302-3-T2T2NE (Standard Model)

* Additional charges apply

Technical Specifications

Communication	
Ethernet Port (P1)	10/100 Mbps
Protocol	TCP, UDP, HTTP
RS-485 (P2, P3)	
Baudrate	1200/2400/4800/9600/19200/38400 bps
LoRa (Optional)	
RF Range	860-935 MHz
ISM Bands	EU863-870, RU864-870, IN865-867, US902-928, AU915-928, AS920-923 and AS923-925
RF Output Power	19 dBm (Maximum)
Receiver Sensitivity	-137 dBm (Maximum)
Output Watts	0.03 (Typical)
FCC Part 15C	Certified by TCB
Front Panel LED Indicators	
Run (Green)	Blinking - System is running normally
Data (Yellow)	Blinking - LoRa is receiving or transmitting data
P2, P3 (Green)	Blinking - Receiving activity
P2, P3 (Yellow)	Blinking - Transmitting activity
Power Supply (L/+, N/-)	
Standard	95-250VAC/DC, 47-440Hz
Burden	<3W
Protection	
ESD Protection	8kV
Isolation Protection	3kV for RS-485 1.5kV for Ethernet Port
Environmental Conditions	
Operating Temp.	-25°C to +70°C
Storage Temp.	-40°C to +85°C
Humidity	5% to 95% non-condensing
Atmospheric pressure	70kPa to 110kPa
Mechanical Characteristics	
Unit Dimensions	72x65x95mm
Shipping Weight	TBD
Shipping Dimensions	TBD
Mounting	DIN Rail
IP Rating	20

Dimensions



Your Local Representative

CET Electric Technology Inc.
E: sales@cet-global.com
W: www.cet-global.com

Revision Date: June 22, 2020