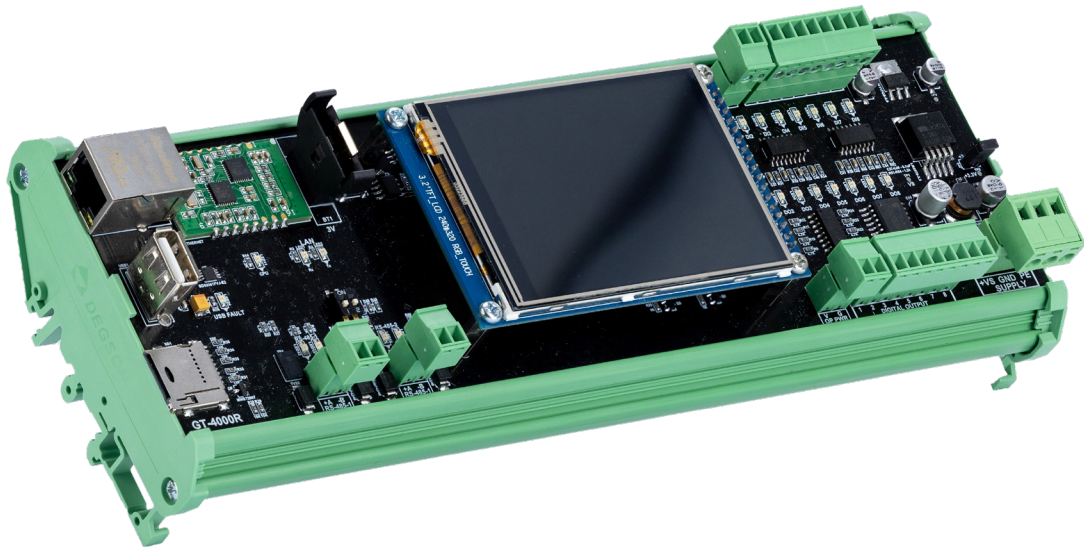


GT-4000R

Compact Remote Terminal Unit



Unit Description

The **GT-4000R** is compact RTU under brand GRO PRO TECH, as a modular, powerful and scalable controller capable of all remote automation and control applications. It is designed to communicate with SCADA or server api via Ethernet with Modbus TCP and Serial Port RS-485 with Modbus RTU and interface with local Slave Modbus by RS-485

Moreover, the **GPT-SmartLink** is in-house software for Configure, Setting, Control and Monitoring under brand GRO PRO TECH. It is convenient to use and develop with your automation system.

Typical Application

- Main communicate in remote site with SCADA or Server System
- Support Remote and Local Monitoring and Control to any Modbus Slave Board
- Industry standard protocols of Modbus as master and slave
- Data acquisition and control in utilities, ex. energy management.
- Environment Monitoring, ex. Modern IoT sensor.
- Centralize System for several Slave Node with Modbus RTU

Innovative Feature and Solution

- High Performance for rapid control and monitoring with 32bit Microcontroller base.
- On board Real Time Clock and EEPROM for System Clock Synchronize and Setting Store.
- Industrial Grade with IEC and EN for Complied to CE standard.
- 1x Ethernet, Modbus TCP
- 2 x RS-485, Modbus RTU
- On board 8 x Digital Input with Opto-Isolated
- On board 8 x Digital Output with Opto-Isolated.
- Data Logger CSV file with internal microSD socket and USB 2.0 port.

GT-4000R

SPECIFICATION

PERFORMANCE	
Processor	Microchip 32 Bit high-performance microcontroller 96MHz
Nonvolatile Memory	1024 Mbit
Clock	Internal Real Time Clock with Battery Backup
DATA LOGGER	
USB	USB2.0 Type A
SD CARD	microSD
Data Format	FAT32 / CSV File
Data Recording	Select from Data Polling
USER INTERFACE	
LCD	IPS LCD 240x320pixel With Touch Screen
Software	GT-LINK software or standard Modbus Protocol Program
COMMUNICATION	
Ethernet	Modbus TCP (Server)
	1 x Ethernet 10/100 (RJ-45), Isolation 1.5kVrms (1 Minute)
	Enhanced ESD protection: IEC 61000-4-2 level 4
RS-485	2 x RS-485: Ch.1 & Ch.2
	Protocol Modbus RTU Slave and Master (Configurable)
	Enhanced ESD protection: IEC 61000-4-2
PERIPHERAL	
Digital Input On Board	8 Channel / Input 100mA (max) / Isolated-Optocoupler
	Input Mapping for send status to External I/O, ex. Local/Remote
	Isolated Optocoupler 3750 Vrms (min)
Digital Output On Board	8 Channel / Open Collector 200mA (max)/ Isolated-Optocoupler
	External Output Contactor, ex. Relay, Magnetic Contactor.
	Isolated Optocoupler 3750 Vrms (min)

GT-4000R

SPECIFICATION

EXTENSION INTERFACE	
Slave IO Controller	RS-485 : GT-IO3216 Board, Modbus RTU (Default) RS-485 : Any IO with Modbus RTU Slave Board
Sensor Monitoring	RS-485 : Sensor Modbus RTU
Wireless Communication	Support Modbus RS-485 to Wireless Converter (option)
SOFTWARE INTERFACE	
GPT-SmartLink™	The Software Monitoring and Setting with GT-4000R / GT-IO3216
Client / Software Interface	Modbus TCP/RTU Protocol
General Modbus TCP/RTU	Support Standard Modbus software
POWER SUPPLY	
Voltage Input Range	12 - 24 VDC
Max. Input Current	0.50 Adc
Operating Temperature	-10°C to +70°C
Over Current Protection	Onboard 0.60 A with Polyswitch
Earthing Protection	Terminal on Board
I/O Power Supply	External Power Supply
MECHANICAL	
Mounting	DIN Rail Holder
Dimension	(W)85mm. x (L)240mm. X (H)50mm.
STANDARDS / DIRECTIVES	
CE	In conformance with EMC Directive 2004/108/EC and Low Voltage Directive 2006/95/EC
EN IEC 61000-6-2 ^{note1,2}	Immunity for industrial environments (Industrial Grade)
EN IEC 61000-6-4 ^{note1,2}	Emission for industrial environments (Industrial Grade)
EN IEC 61000-3-2 ^{note1,3}	Harmonic Emission
EN 61000-3-3 ^{note1,3}	Voltage Fluctuation

Note

- 1) Test with AC/DC Power Supply Delta-DRC-12V030W1RZ and AC Line Filter SCHAFFNER-FN2412-8-44
- 2) EN IEC 61000-6-2:2019 and EN IEC 61000-6-4:2019
- 3) EN IEC 61000-3-2:2019+A:2021 and EN 61000-3-3:2019+A1:2019+A2:2021