



ProtoConvert – Modbus RTU / Modbus TCP/IP / BACnet MSTP / BACnet IP / SNMP - Telnet (Lighting Controller)

PG-100-101-102-103-104-110-120



PG-100-101-102-103-104-110-120 is an embedded remote monitoring solution that supports a Telnet interface and a Modbus RTU or Modbus TCP or BACnet MSTP or BACnet IP or SNMP interface. You can see specification and Products code below.

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Hardware Specifications:

	PG100
CPU info	CPU 700 MHz ARM1176JZF-S
GPU info	GPU Broadcom VideoCore IV
RAM	1GB RAM
Flash	4Gbyte eMMC Flash (Expandable)
Power supply	
Supply voltage	8 ... 28V DC
Interfaces	
Ethernet	1 x Ethernet 10/100-Mbit, Auto MDI-MDIX, RJ-45
RS-232	1 x RS-232 (RXD, TXD, RTS, CTS), DB9 male
RS-485	1 x RS-485, terminal blocks
Digital Input	8 x Digital Input Opto Isolated 4x Dry Contact Digital Inputs
Digital Output	8 x Digital Output (Open Drain)
Analog Input	-
Analog Output	-
GSM/GPRS	-
Standards	
EU standard	EN 61326-1:2013
Environment	
EMC	EN 55011 group 1 class A, EN 55011 group 1 class B
Operating Temperature	0 °C ~ 50 °C
Operating Relative Humidity	5 ~ 95%, non-condensing
Storage Temperature	-25 °C ~ 80 °C
Protection Rating	IP20
Dimension	158 x 114 x 59 (L x W x H)
Mount	Din-rail, wall mount
Weight	260g



Protocols Information

Modbus RTU:

Driver Type: Slave/Master

Connection information:

Connection type:	RS-232 or RS-485 (Two wire, Half-Duplex)
Baud Rate:	110 – 115200, standard baud rates only
Data Bits:	7, 8
Parity:	Even, Odd, None
Multidrop Capability:	Yes

Function codes supported:

Function Codes	Description
01	Read Discrete Output Status (0xxxx)
02	Read Discrete Input Status (1xxxx)
03	Read Output Registers (4xxxx)
04	Read Input Registers (3xxxx)
15	Force Multiple Coils (0xxxx)
16	Preset Multiple Registers (4xxxx)

Data Types supported:

Data Type	Comments
Signed	Signed 16-bit integer
Unsigned	Unsigned 16-bit integer
Long	Unsigned 32-bit integer
Long integer swapped	Unsigned 32-bit integer
Single precision Float	32-bit IEEE floating point
Single precision swapped float	32-bit IEEE floating point
Bit	Digital



Modbus TCP/IP:

Driver Type: Client/Server

Connection information:

Connection type:	Internet Protocol (IP)
Ethernet Speeds	10Base-T, 100Base-T

Function codes supported:

Function Codes	Description
01	Read Discrete Output Status (0xxxx)
02	Read Discrete Input Status (1xxxx)
03	Read Output Registers (4xxxx)
04	Read Input Registers (3xxxx)
15	Force Multiple Coils (0xxxx)
16	Preset Multiple Registers (4xxxx)

Data Types supported:

Data Type	Comments
Signed	Signed 16-bit integer
Unsigned	Unsigned 16-bit integer
Long	Unsigned 32-bit integer
Long integer swapped	Unsigned 32-bit integer
Single precision Float	32-bit IEEE floating point
Single precision swapped float	32-bit IEEE floating point
Bit	Digital

BACnet IP:

Driver Type: Client/Server

Connection information:

Connection type:	Internet Protocol (IP)
Ethernet Speeds	10Base-T, 100Base-T
BBMD	Not supported
Foreign Device	Not supported



Data Types Supported:

Function Codes	Description
AI	Analog Input Object
AO	Analog Output Object
AV	Analog Value Object
BI	Binary Input Object
BO	Binary Output Object
BV	Binary Value Object
MI	Multistate Input Object
MO	Multistate Output Object
MV	Multistate Value Object
LSP	Life Safety Point Object
LSZ	Life Safety Zone Object

Read Operations Supported	Properties Supported
Read Property	Present Value
Write Operations Supported	Properties Supported
Write Property	Present Value

BACnet MSTP:

Driver Type: Slave/Master

Connection information:

Connection type:	RS-485 (2 wire half-duplex)
Baud rates	9600, 19200, 38400
Parity	Odd, Even, None
Data bits	7,8
Stop bits	1, 2
Multidrop Capability	Yes (When configured as a BACnet master, there is no physical limit to the number of remote BACnet slave devices is supported. When configured as BACnet slave, there is no physical limit to the number of virtual slave nodes supported. In both cases, the limitation is the point count capacity of the Device.)



Data Types Supported:

Function Codes	Description
AI	Analog Input Object
AO	Analog Output Object
AV	Analog Value Object
BI	Binary Input Object
BO	Binary Output Object
BV	Binary Value Object
MI	Multistate Input Object
MO	Multistate Output Object
MV	Multistate Value Object
LSP	Life Safety Point Object
LSZ	Life Safety Zone Object

Read Operations Supported	Properties Supported
Read Property	Present Value
Write Operations Supported	Properties Supported
Write Property	Present Value

SNMP:

Driver Type: Client/Server

Connection information:

Connection type:	Internet Protocol (IP)
Ethernet Speeds	10Base-T, 100Base-T
SNMP Version	SNMP v1, SNMP v2c Supports
Foreign Device	Not supported

SNMP Driver support SNMP version v1 and v2c only. We can configure SNMP as Manager or Client which receive trap and send trap Message.

Column Number	Column Name	Description	Valid parameters
1	Node_Name	Name of the node	Any name 32 characters or less
2	IP_Address	IP Address	Valid IPv4 address
3	Port	Port on which the SNMP manager is listening for traps	Valid port 1-65535 as configured on the SNMP manager



Telnet (for lighting controller) Driver:

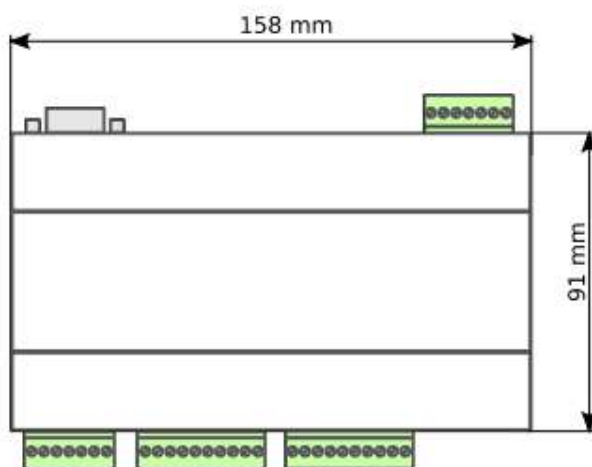
Driver type: Client

Commands supported*:

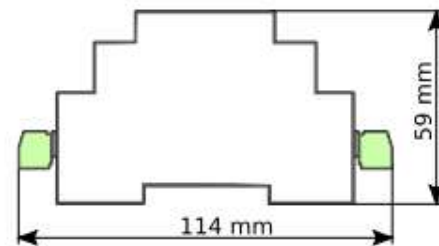
- TASK
- GETTASK

*Commands list will change on base of device supports.

Dimension:



TOP View



Side View



Model Selection:

MODEL NO.	DESCRIPTION
PG-100-110	Modbus RTU – Telnet Ethernet (Bi-directional)
PG-101-110	Modbus TCP/IP – Telnet Ethernet (Bi-directional)
PG-102-110	BACnet MSTP – Telnet Ethernet (Bi-directional)
PG-103-110	BACnet IP – Telnet Ethernet (Bi-directional)
PG-104-110	SNMP – Telnet Ethernet (Bi-directional)
PG-100-120	Modbus RTU – Telnet Lighting Control RS - 485 (Bi-directional)
PG-101-120	Modbus TCP/IP – Telnet Lighting Control RS - 485 (Bi-directional)
PG-102-120	BACnet MSTP – Telnet Lighting Control RS - 485 (Bi-directional)
PG-103-120	BACnet IP – Telnet Lighting Control RS - 485 (Bi-directional)
PG-104-120	SNMP – Telnet Lighting Control RS - 485 (Bi-directional)