PG-138-101-AB Edwards System Technology to Modbus TCP Protocol Converter

PG-138-101-AB is highly powerful, superior, completely configurable and productive Building & Industrial Automation gateway for integrators to effortlessly interface devices to networks in commercial buildings and industrial plants.

PG-138-101-AB Gateway model supports Edward System Technology and Modbus TCP protocols. It is a Bi-directional Converter that can be configured as a Client on Edward System Technology side and a Server/Client on Modbus TCP protocol interface.

When configured as a Edward System Technology client, the PG-138-101-AB can read data from your Edward System Technology fire panel and publish it as Modbus TCP data. Also, it can write commands sent from the Modbus TCP side to the Edward System Technology fire panel.

When configured as a Modbus TCP client, the PG-138-101-AB can read data from your Modbus TCP devices and publish it as Edward System Technology type data. Also, it can write commands sent from the Edward System Technology side to the Modbus TCP devices.

The PG-138-101-AB can be configured to behave as a server on Modbus TCP interfaces. This mode is useful when data exchange is required between a Edward System Technology client (for eg. SCADA) and a Modbus TCP client (for eg. a Building Management System).

The PG-138-101-AB can be configured to behave as a client on both Edward System Technology and Modbus TCP interfaces.

PG-138-101-AB gateways have benefitted system integrators worldwide with its powerful line of gateways. Additionally, PG-138-101-AB gateway runs the same protocol conversion software on a productive and cost efficient platform backed by the experience, engineering expertise and technically proven support that integrators have come to expect from PG-138-101-AB.

Features

- Ability to interface upto 1000 points
- DIN rail mount optional
- DIP switches to select baud rate or node ID on the fly
- Multi-configuration capability
- BACnet COV support for fast data communication while reducing the traffic over a BACnet network

Specifications

Environment	Operating Temperature: -40 to 75° C (-40 to 167°F)	
	Relative Humidity:5-90% RH non-condensing	
Power Requirements	9-30 VDC or 12-24 VAC	
	Current Draw @ 12V about 250Ma	
Physical Dimensions(HxWxD)	4.5x2.9x1.6 in. (11.5x7.4x4.1 cm)	
	0.4 lbs (0.2 Kg)	
Other	Configuration/Diagnostic utilities	
	Capacity: 1000 points	
	Table,Wall or DIN rail mount	
Communication Interfaces	RS-485	1
	RS-485 or RS-232	1
	Ethernet 10Base-T, 100BASE-T[2]	1
	Mbus	-
	KNX	-
	LonWorks	-
Approvals	TUV Approved to UL 916 and CSA C22.2 standards	
	BTL and LonMark certified	
	LonMark Certified	
	RoHS Compliant	
	GOST-R Certified	
	CE and FCC	

Edwards Systems Technology Protocol Driver Description

Formal Driver Type	Serial
	Passive Client
Connection Information	
Connection Type:	RS-232 Edwards
Baud Rates:	9600 (Vendor Limitation)
Data Bits:	8 (Vendor Limitation)
Stop Bits:	1 (Vendor Limitation)
Parity:	None (Vendor Limitation)
Multidrop Capability:	No
Devices Tested	
Device	**Tested (Factory, SITE)**
Edwards Systems Technology-European and American QS1-2/QS4-8 Addressable Panels, and the QSC Conventional Panel	SITE

Supported Communication Functions

Event Description Text Strings		State	Comments
ACTIVATE RESTART			-OPERATOR COMMAND- clears all the Data Arrays
QUIESCENT	QUIE RST		Not Implemented
ALARM ACTIVE	ALARM RST	A	
PULL STATION	PULL STA RST	A	
HEAT ALARM	HEAT ALM RS	A	
WATERFLOW	WATERFLOW RS	A	
STAGE ONE		A	
SUPERVISORY	SUP RST	S	
TAMPER	TAMPER RST	S	
SECURITY	SECURITY RST	O	
FIREPHONE	PHONE RST	M	
MONITOR	MONITOR RST	M	
LATCH SUPV	LAT SUPV RST	S	
LATCH TAMPER	LAT TAMP RST	S	
UNKNOWN	UNKNOWN RST	O	
ALARM VERIFY	ALM VFY RST	M	
PREALARM	PREALARM RST	M	
TROUBLE OPEN	TBL OPEN RST	T	
TROUBLE SHRT	TBL SHRT RST	T	
LCL TROUBLE	LCL TRBL RST	T	
MAINT ALERT	MAT ALERT RS	M	
DIRTY HEAD	DTY HEAD RST	T	
COMMN FAULT	COMM FLT RST	T	
GROUND FAULT	GND FLT RST	T	

INTERNAL TBL	INTR TRBL RS	T	
BAD TYPE	BAD TYPE RST	T	
BAD PRSONATY	BAD PRSTY RS	T	
UNEPECT DEV	UNEC DEV RST	T	
TROUBLE	TROUBLE RST	T	
RELAY CONFIR	RLY CFRM RST	M	
LCL MONITOR	LCL MNTR RST	M	
SWITCH	SWITCH RST	M	
TEST	TEST RST	T	
DEV COMPATBL	DEV COMP RST	T	
AND GROUP	AND GRP RST	A	
MATRIX GROUP	MATRIX G RST	A	
SERVICE GRP	SERVICE G RS	T	
TIME CONTROL	TIME CNTL RS	M	
ACK	ACK RST	M	
DISABLED	DISABLED RST	T	
DISAB SOUND	DISSOUND RST	T	
OBJECT RUN	OBJETRUN RST	M	
ZONE ALARM	ZONE ALM RST	A	
ZONE SUPER	ZONE SUP RST	S	
ZONE MONITOR	ZONE MON RST	M	
OUTPUT GROUP	OUTPUT G RST	M	
AUDIBLE	AUDIBLE RST	M	
VISUAL	VISUAL RST	M	
SUPER OUTPUT	SUPER OUT RT	M	
NONSUPER OUT	NONSUP OUT R	M	
COMM ALM OUT	COMMALOUTRST	M	
LED OUTPUT	LEDOUTPU RST	M	

Limitations and Exclusions

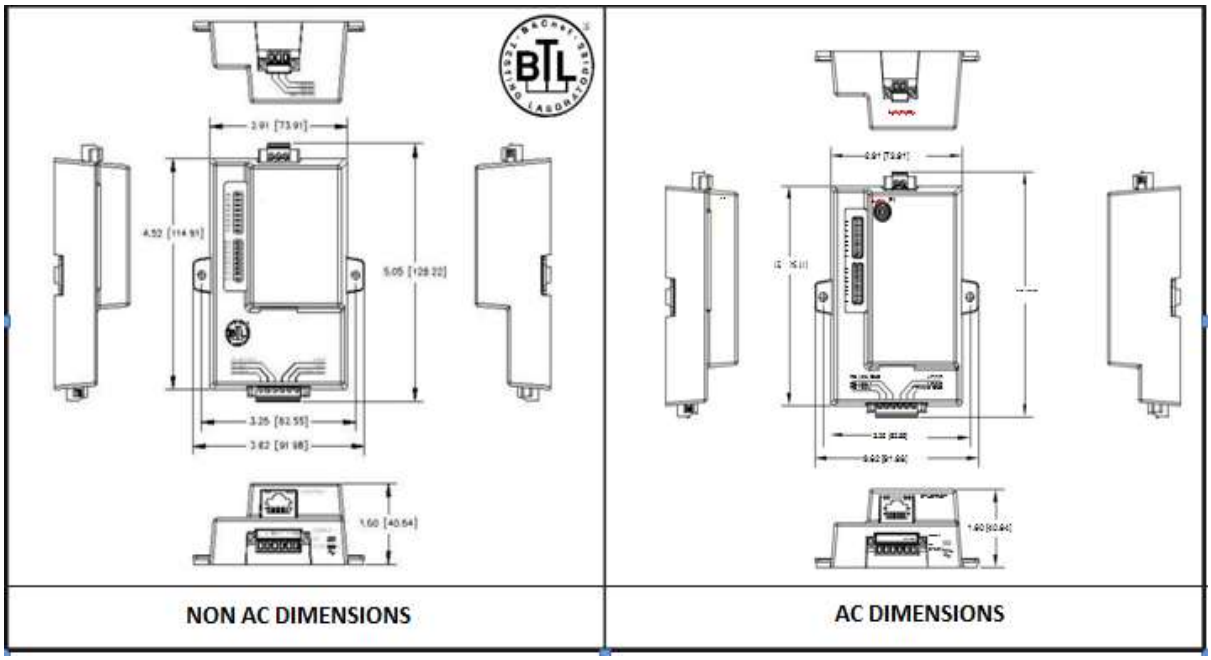
- Only one Quickstart panel may be connected to any given RS-232 port at once.
- This driver cannot poll for data, thus if a message sent by the panel is lost or corrupted the status reported will not correctly reflect the status of the panel until the panel is synchronized again or until the device receives a new message reporting the status of the lost message's point.
- Because of the message structure for the QuickStart protocol, it was intended to be the only protocol assigned to any single port.

Modbus TCP Protocol Driver Description

PG-138-101-AB	Client	Nodes:1 Only 1 client node allowed on Multidrop systems
	Server	Nodes:255 Actual electrical loading may reduce number of usable Server nodes
Formal Driver Type	Ethernet Client or Server	
Connection Information	Connection Type:	Ethernet
	Ethernet Speed Supported:	10Base-T, 100Base-T[1]
Data Type Supported		
Command	**Description**	
01	Read Discrete Output Status (0xxxx)	
02	Read Discrete Input Status (1xxxx)	
03	Read Output Registers (4xxxx)	
04	Read Input Registers (3xxxx)	
05	Force Single Coil (0xxxx)	
06	Preset Single Register (4xxxx)	
15	Force Multiple Coils (0xxxx)	
16	Preset Multiple Registers (4xxxx)	
EX	Exception Status	
FF	FIFO	

Data Type	Comments
ASCII	8-bit Character
Digital	Digital
Float	32-bit IEEE floating point
Long	Unsigned 32-bit integer
Signed	Signed 16-bit integer
Slong	Signed 32-bit integer
Unsigned	Unsinged 16-bit integer

Dimensions:



NON AC DIMENSIONS	AC DIMENSIONS