

- Easy Connection of Woodward Control or Protection Device to PC or Laptop
- Interfaces with RJ45 Connector and Standard USB Port
- For use with:
 - WI Family
 - easYgen 2000 Series
 - easYgen 1000 Series
 - easYgen 300 Series
 - DTSC 200
 - MFR 300
 - MFR 500
 - IKD
 - GCP20
 - GCP30
 - MFR 1 Series
 - MFR 2 Series
 - MFR 3 Series
 - SPM-D Series

USB-UART Converter

P/N 5417-1251 or P/N WIC1PC3

USB-UART Converter

Introduction

The USB-UART Converter is used to connect a Woodward control or protection unit with a PC or laptop for configuration and monitoring purposes. The PC/laptop side is separated from the Woodward unit side through galvanic isolation. Part number 5417-1251 is dedicated for use with easYgen* family devices, while P/N WIC1PC3 is dedicated for use with WI family devices.

* Trademark of Woodward, Inc

Please download and install the latest VCP driver from:

www.ftdichip.com/Drivers/VCP.htm

The appropriate PC software for P/N 5417-1251 can be downloaded and installed from the Woodward website: www.woodward.com/software.

Software for P/N WIC1PC3 can be downloaded from the Woodward website: www.woodward.com/software. Search for "WI-SOFT2" with Software Type set to "Service Tool" and Product Category set to "Protection Relays".

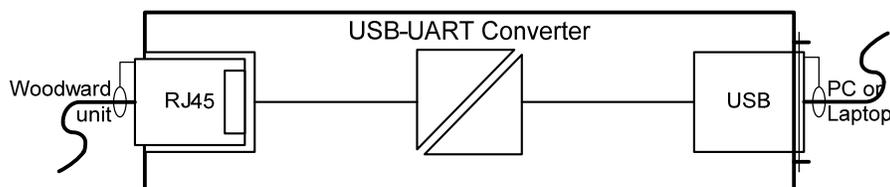
The tool configuration files needed to communicate with Woodward units can be found on: <http://eps.woodward.com>.

Usage of the USB-UART Converter

Two connection cables are delivered with the USB-UART Converter. Use standard 1.1 or 2.0 USB cable (P/N 5417-1262) for the connection between the PC/laptop and the USB-UART Converter. For the connection between the USB-UART Converter and the Woodward unit, use easYgen Standard Ethernet Cat5 cable 1:1 (P/N LR04144) or WI line dedicated cable (P/N 5417-1263), as appropriate. Maximum length for the EG cable must not exceed 0,5 m (0,5 m cable supplied with device). Maximum length for the WI cable must not exceed 1,5 m (1,5 m cable supplied with device).

An extension or utilization of different cable types for the connection between the Woodward unit and the USB-UART Converter may result in a malfunction of the unit. This may result in damage to system components. Woodward does not guarantee proper USB-UART Converter operation for cable length more than specified. If an extension of the data connection line is required, only the USB cable between the PC or laptop and USB-UART Converter may be extended. Woodward recommends using an industry standard cable for this. Maximum length for the USB cable must not exceed 5 m (1,8 m cable supplied with device).

Connection Diagram



Approvals

Standards:

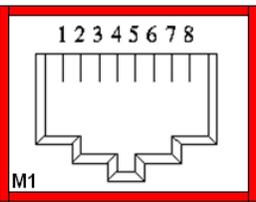
- EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-6
- EN 61000-6-2, EN 61000-6-3

Technical Specifications

Dimensions: approximately 85 mm x 50 mm x 22 mm (L x W x H)
 Weight: approximately 60 g (without cables)
 Transmission: Maximum transmission speed on UART side: 115200 baud
 Maximum transmission speed on USB side: 12 Mbit/s (according to USB 2.0 standard)
 Temperature: Ambient operating temperature: (–20 to +70) °C
 Storage temperature: (–40 to +85) °C
 Power supply: 5 V via USB connector (on host PC side)
 5 V via RJ45 connector (Woodward unit side—only for P/N 5417-1251)
 Interfaces: RJ45 connector to Woodward units, which support USB-UART connectivity
 USB connector to PC or laptop using a standard USB cable

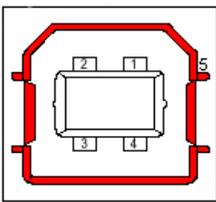
Connector Pinouts

RJ45 Jack Pinout



Pin #	Signal (WI)	Signal (EG)
1	12 V	Not connected
2	Not connected	5 V
3	RxD–	Not connected
4	Not connected	Not connected
5	GND	GND
6	RxD+	RxD
7	TxD+	TxD
8	TxD–	Not connected
M1	SHIELD	SHIELD

USB Type B Socket Pinout



Pin #	Signal
1	5 V USB
2	D–
3	D+
4	GND USB
5	SHIELD

NOTICE

This device may be susceptible to EFT (Electrical Fast Transient) and to ESD (Electrostatic Discharge), especially around noisy and high-power devices and machinery. If events like EFT or ESD affect the device, a software reset procedure is required.

We appreciate your comments about the content of our publications.

Send comments to: icinfo@woodward.com

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