#### **USB TO RS485 INLINE ADAPTER CABLE**

The USB-RS485-WE cable is un-terminated; it has bare and tinned wires.

The cable outputs 5V power on the wire by default. This can be modified to output 0V power. The letter X in the part number indicates the output power selection.

#### 5.1 USB-RS485 Connections and Mechanical Details

The following **Figure 5.1** shows the cable signals and the wire colours for the signals on the USB-RS485 cable.

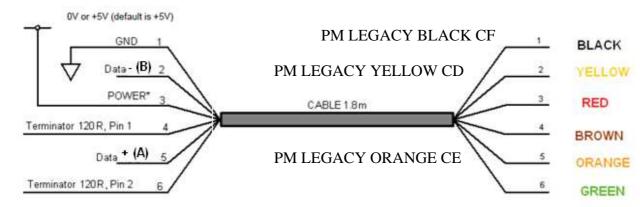


Figure 5.1 USB-RS485 Connections

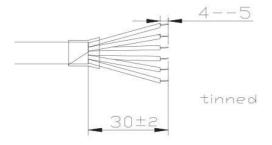


Figure 5.2 USB-RS485 Mechanical Details (dimensions in mm)



Figure 5.3 USB-RS485 Cable images



## 6 Cable PCB Block Diagram

The block diagram for the small internal electronic circuit board, utilising the FTDI FT232R, which is encapsulated into the USB connector end of the cable, is shown in Figure 6.1.

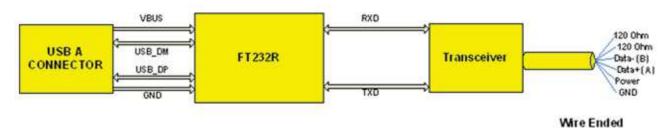


Figure 6.1 Block diagram of PCB Used in the USB to RS485 Serial Converter Cable

## 7 USB-RS485 - Schematic

Schematic for converter cable, USB-RS485 is shown below in figure 7.1

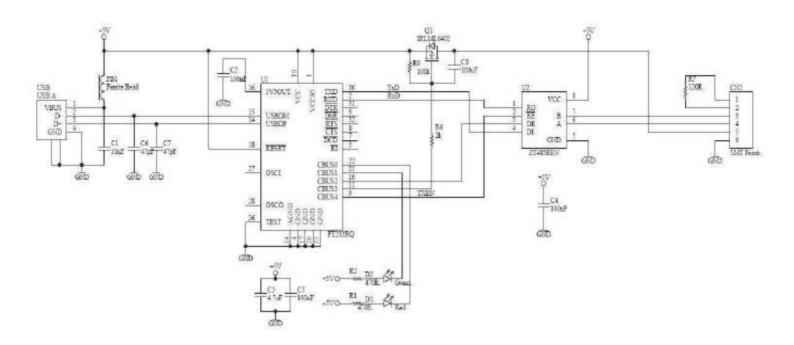


Figure 7.1 Schematic of USB-RS485 Converter Cable

# Software Driver Link: https://www.ftdichip.com/Drivers/D2XX.htm

For Windows scroll down to Operating system and click on blued out setup\_executable link Download the zip file and open to click on the execute file to load the driver for the adapter

Operating System	Release Date	X86 (32-Bit)	X64 (64-Bit)	ARM	MIPS	SH4	Comments
Windows*	2021-06-17	2.12.36.2	2.12.36.2		-	-	WHQL Certified.Includes VCP and D2XX. Available as a <u>setup executable</u> Please read the <u>Release Notes</u> and <u>Installation Guides</u> .

The file link can also be downloaded directly from Sensemasters website as marked Driver set-up execute file (zipped) on our Adapter/Connector page:

https://sensemaster.co.uk/adapter-connectors/

Sensemaster Direct Download link:

https://sense master.co.uk/wp-content/uploads/2021/07/FTDI-PM-TO-USB-DRIVER-EXECUTE-FILE.zip