



Resource  
Data Management

# USB 8 Channel Pulse Reader

Installation/User Guide  
Revision 1.0a



PR0622  
PR0622 DIN

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Please ensure all power is switched off before installing or maintaining this product.

# USB 8 Channel Pulse Reader

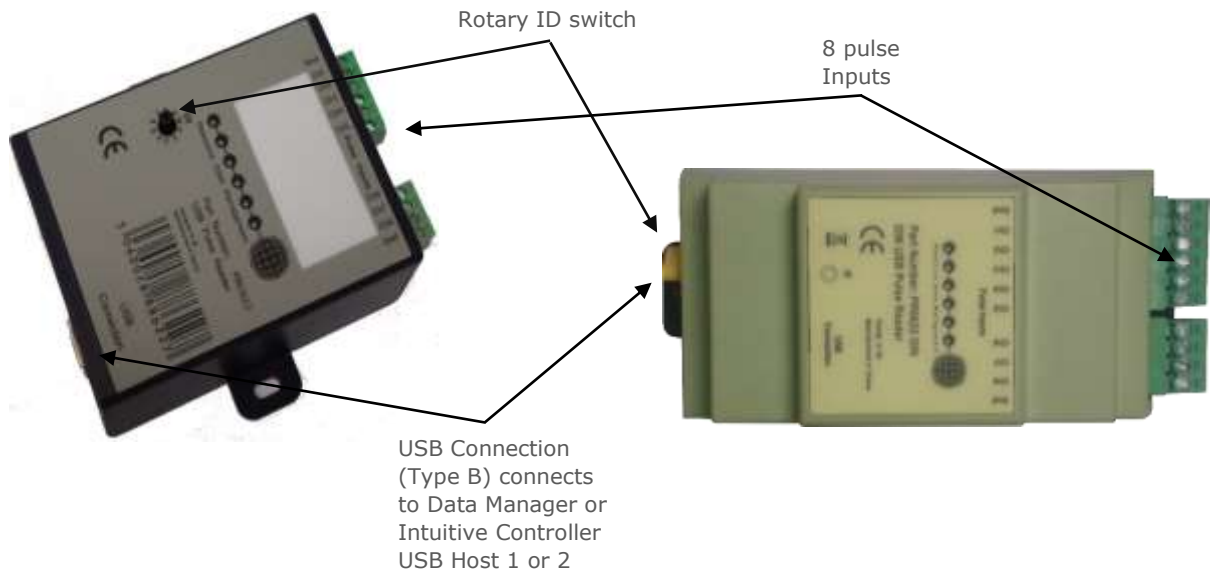
## From Resource Data Management

This device connects to a USB port on a TDB device, compatible TDB devices are: Intuitive TDB, Mini Intuitive TDB, TouchXL TDB, DMTouch and miniDM. Up to three PR0622 Pulse Readers can be connected to a single TDB device. Since the number of USB ports available depends on the device type (the Intuitive TDB controller has two for example) then the number of USB ports available may need to be expanded using a USB hub (see note below). The PR0622 has a rotary switch which allows the user to uniquely address each module. If the rotary switch is set to any of the following then the pulse reader will appear as highlighted below, the remaining positions are not currently utilised and should not be configured.

Position 1: - Equates to device 1 and Channel 1 through to 8.

Position 2: - Equates to device 2 and Channel 9 through to 16.

Position 3: - Equates to device 3 and Channel 17 through to 24.



Note: If a USB hub is used then it must be self-powered and should not obtain its operating power supply from the controller USB ports. Failure to use a self-powered hub will result in damage to the controller and will invalidate the controller warranty. RDM recommend PR0624 DIN 4 Port USB Hub.

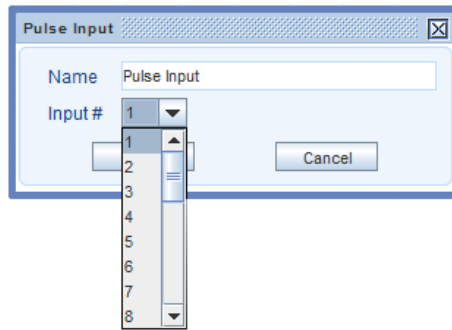
A single PR0622 has 8 channels to count pulses therefore a total of 24 channels can be monitored if three devices are used. A Pulse Reader input block/channel must be used to incorporate the pulse counts from each channel into a data builder program. Each channel on the pulse reader requires a 0V return switching through e.g. a utility meter volt-free relay. The maximum speed that the pulse reader can read is 10msec mark – 10mSec space per channel. Below is the Data Builder Icon for pulse input:



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Use one of these blocks per channel required in the Data Builder program. The count output is stored in the controller memory on the hour and half past the hour.

Display the properties for this block to select the channel number and name the block. Up to 24 inputs are available to select from the drop-down menu:



When connected to an Intuitive, Mini Intuitive or TouchXL TDB controller the Pulse Reader counts can be checked in the controller by selecting the Information tab from the Service menu and then Pulse Counter. Channel counts can be read from this screen and channel counts can be cleared on an individual basis. "0" in a channel count indicates that Channel has had zero counts and the Pulse Reader module is present for that range of channels. "---" shows that the Pulse Reader module isn't present for that range of channels.

The PR0622 is supplied with a Male USB A to Male USB B Cable, which is 0.5m in length, to facilitate the connection to a host device.

**Note:** The maximum cable run for the Pulse Counter input will be determined by the overall resistance accumulated in cabling and driving source. The Pulse Counter input has a resistance of 10kOhm pulled up to 3.3V. A valid low level input voltage is a maximum of 0.5V. Cabling and input driving source resistance must be low enough to ensure this voltage or lower is achieved at the Pulse Counter input terminals.

Longer runs of cabling can introduce issues with cable capacitance, inductance and increased susceptibility to Electromagnetic interference (EMI) therefore a suitable cable and good wiring practices should be followed.

## Revision History

Date	Version	Update No	Changes
05/09/2020	V1.0	01	First release
30/05/2023	V1.0a		Note added about cable run.



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