Resource
Data Management

RDM USB 5 Channel Current Monitor

User Guide
Revision 1.3

PR0626

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

RDM USB 5 Channel Current Monitor (Part Number: PR0626 / PR0626i/v DIN)

The USB Current Monitor provides an interface for the RDM Intuitive Superpack controller (PR0650-SUP) and Intuitive Plant TDB controller (PR0650-TDB) to allow up to 5 Current Transformers (CT) to be connected. The PR0626 DIN is available in two different variants, one which uses current transformers with a 5A secondary (PR0626i DIN) and one which uses current transformers with a 0.333v secondary (PR0626v DIN). The non-DIN rail version PR0626 uses only current transformers with a 5A secondary.

The Current Transformers are used to measure current being drawn from devices when they are in operation. This enables the Superpack or TDB controller to be used for recognising whether a device is running, when it's being requested to by the control strategy. When configured within the TDB or Superpack controller, it enables the control logic to shut down the device (of which it is monitoring) if it is drawing too much or too little current and allows constant logging* of current consumption.

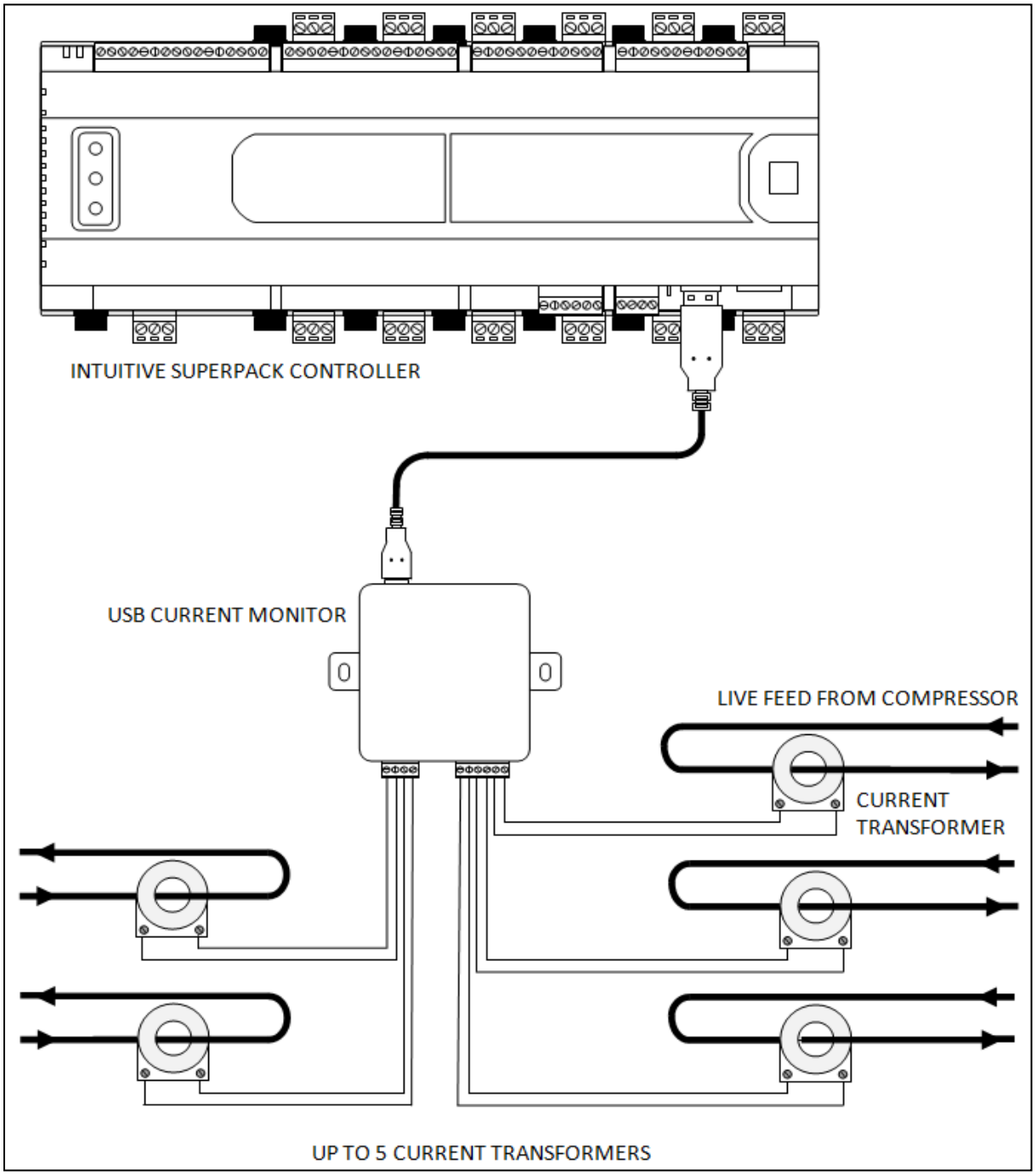
The Current Monitor is designed to be used with current transformers with 5amp secondaries (e.g., Farnell part 1373206) or 0.333 volts AC secondaries (e.g., RDM Part PR0675-150A). The configuration and scaling of the CT is carried out within the Superpack software. For the TDB device, the configuration is done using the block within the design application platform. Please consult the device's documentation for more details).

Up to 10 individual Current Monitors (each with 5 CTs) can be connected to either Superpack or TDB Controller, with each having a rotary switch ID to identify it. To accommodate multiple Current Monitors an RDM 4 Port USB Hub can be utilised (PR0624), this provides the controller with four additional USB ports.

The Current Monitor is powered via the host controller's USB port, so no additional power supply is required, although the 4 Port USB hub, if used, requires a 24v AC or DC supply (the same as the main controller).

*Plant TDB software version V3.5.0 or higher.

Typical Wiring



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Specification

	PR0626	PR0626i/v DIN
Power Requirements		
Power	5v dc, 100ma, supplied from controller via USB	5v dc, 100ma, supplied from controller via USB
General		
Operating temperature range	5^0C to 50^0C (41°F to 122°F)	-10^0C to 60^0C (14°F to 140°F)
Operating Humidity	80% maximum	80% maximum
Environmental	Indoor use at altitudes up to 2000m, pollution degree 1, installation category II. Voltage fluctuations not to exceed ±10% of nominal voltage.	Indoor use at altitudes up to 2000m, pollution degree 1, installation category II. Voltage fluctuations not to exceed ±10% of nominal voltage.
Size (L x W x H)	105mm (4.1in) x 97mm (3.8in) x 30mm (1.2in)	52.5mm (2in) x 134mm (5.2in) x 67mm (2.6in)
Approx. Weight	120g (0.26lbs)	150g (0.33lbs)
EMC	EN61326-1: 2013	EN61326-1: 2013
Ventilation	There is no requirement for forced cooling ventilation.	There is no requirement for forced cooling ventilation.
Data		
Connection type	USB type B	USB type B
Max Cable Length	USB 3m	USB 3m
Wiring connections		
Max cable size	2.5mm (14awg), pluggable screw terminals	2.5mm (14awg), pluggable screw terminals
Mounting		
Mounting centres	85mm	DIN rail mount

Warning

Care should be taken when connecting and disconnecting the 5A current transformer secondaries. The secondary side should never be left open circuit when there is a load present the primary side.

Revision History

Revision	Date	Changes
1.0	21/09/2017	First Release
1.1	22/01/2018	Voltage CT option added
1.2	23/01/2018	New Look Document

Disclaimer

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