

The **PCM^{ALERT}[™]** series is designed to meet the need for detailed, accurate and relevant information to be provided so that the behavior of signalling point operating mechanisms can be monitored, specifically the operating current drawn each time the points move.

It has been specified functionally by signalling engineers and developed by experts to be the ideal solution for monitoring and reporting the condition of point operating mechanisms. The robust design incorporates modern industry standard architecture, numerous communication protocols and a host of features making it easy to install, operate and interrogate.

The design of **PCM^{ALERT}[™]** means that all of the required equipment is integrated into a single unit which fits into the space of two BR930 specification relays. Where the unit is to be wall mounted then a different mounting plate can be supplied which will allow the unit to be bolted straight to a wall.

Key Features

Connectivity

PCM^{ALERT}[™] is designed to be quickly and easily installed monitoring up to four point ends in a single unit. The only connections required are to the 4-20mA current clamps which are fitted to the point drive circuitry and connections to the point drive relays. The current clamps supplied are of a split core design which makes them easy to install without the necessity to remove any existing signalling wiring. If there are no spare contacts in the point drive relays then **PCM^{ALERT}[™]** can either trigger itself from a change in point drive current or Balfour Beatty Rail can supply additional miniature current clamps which can detect the state of the point drive relays by measuring the current in the coils of the relay.

Power Supply

PCM^{ALERT}[™] will operate from either a 240v or 110v AC supply. Temporary power loss is no problem for **PCM^{ALERT}[™]** because of its internal UPS that is designed to last for at least six hours, depending on the battery size fitted and the number of channels used.

Local Access

PCM^{ALERT}[™] employs a number of indication LED's which can be used to inform the user that the unit is currently operational and the status of the digital inputs. It is also possible to connect a laptop / PDA to **PCM^{ALERT}[™]** using built-in RS232, USB or Ethernet ports. This allows local access to the recorded data to assist with on site installation and subsequent investigations.

Remote Access

PCM^{ALERT}[™] can be connected directly to a network via its TCP/IP Ethernet port, enabling data transfer speeds up to 10Mbps. It can also incorporate either a built in PSTN or GSM modem for remote data access.

Specification

Maximum point ends monitored	4 (Using method described in "Non Intrusive Point Condition Monitoring Specification")
General	
Dimensions (mm)	110 x 135 x 196 (Two adjacent BR930 spec. relay positions)
Weight (kg)	2.13
Power Supply	
Power supply range	110v / 230v AC
Power supply isolation	1kV
Power consumption	12W
Internal UPS	6 hours (Depends upon usage and number of active channels)
Analogue Inputs	
Analogue inputs per unit	4
Analogue input isolation	1kV
Analogue input type	4-20mA
Analogue resolution	10bit
Maximum sampling rate	1500Hz
Current Clamps (where supplied)	
Current clamp type	Split core
Current clamp supply	Isolated 24v
Current clamp range	+/- 20A
Current clamp output	4 - 20mA (Polarity sensitive)
Digital Inputs	
Digital inputs per unit	8
Digital input isolation	1kV
Digital input type	Volt free relay contacts
Data Storage	
Internal data storage	1Gb (As standard)
External data storage	1Gb (w Compact Flash card)
Communications	
Serial	Isolated RS485
Modem	PSTN or GSM
Networking	10 baseT



Balfour Beatty Rail Ltd

Midland House, Nelson Street, Derby DE1 2SA

Tel: +44 (0)1332 262013 Fax: +44 (0)1332 262027 Email: info.bbrt.uk@bbrail.com

For more products and services, please visit: www.bbrail.co.uk