

The **Relay^{ALERT}™** series is based on existing field proven systems and is designed to meet the increasing need for recording detailed, accurate and relevant information. This enables the behavior of a signalling installation to be captured and reviewed to assist in such tasks as performance improvement and incident management. It has been specified functionally by signalling engineers and developed by independent experts to be the ideal monitoring solution for level crossings, interlockings and other bespoke applications.

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 modular design of **Relay^{ALERT}™** allows for up to 384 channels per master unit in steps of 48 channels, which are provided on modular expansion cards and housed within the unit. One master unit and up to seven slave units can be connected together using a standard Ethernet hub, providing over 3,000 channels of data accessible through the master unit, all time-stamped to within 10 millisecond accuracy.

The **Relay^{ALERT}™** series of dataloggers includes a compact version of the standard unit with all the same functions, but with a 192 channel maximum capacity, making it an ideal and cost effective solution for small interlockings, level crossings and lineside location cases where fewer monitored functions are required.

Both versions benefit from dual storage of event data via removable USB memory sticks.

Key Features

Connectivity

At a glance, the user can see the present status of each channel thanks to the breakout board design. The wiring pairs from relays and other devices being monitored are each terminated on a 2-terminal plug that connects to a breakout board mounted on a rack or wall assembly. Each of the 48 channels per board are clearly labelled and indicated by an LED when the relevant contact is closed. For relays this may be a front or back contact and the logger can be configured accordingly. With the breakout board there is no need to supply additional links or further wiring to interface the signalling to **Relay^{ALERT}™**. Each breakout board is connected to its associated expansion card by a single multi-core cable with standard connectors. All necessary components are supplied as part of the package so **Relay^{ALERT}™** will work 'straight from the box' once the power and monitoring connections are made.

Power Supply

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

Local Access

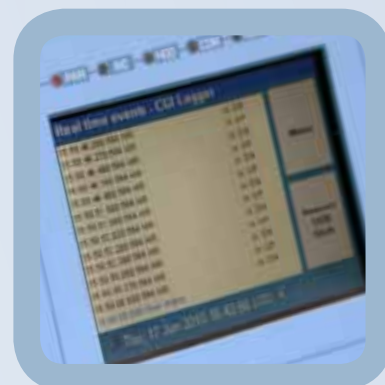
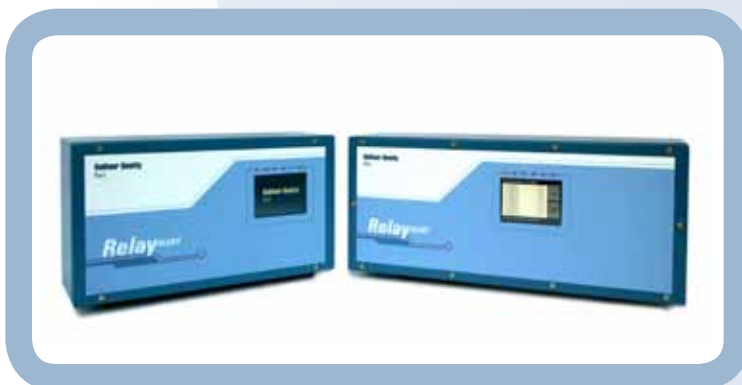
Relay^{ALERT}™ employs an illuminated high resolution LCD touchscreen to access all user functions and offers a simple method of retrieving signalling event data. During normal running the latest events to be recorded will scroll up the screen and it is also possible to connect a laptop, via a standard crossover cable.

Remote Access

Relay^{ALERT}™ can be connected directly to a network via its TCP/IP Ethernet port, enabling data transfer at up to 100Mbps. It also contains either a built in PSTN or GSM modem for remote data access. Importantly the SIM card for the GSM modem is externally accessible allowing the end user to change the SIM if required, preventing the need to return the unit to the supplier.

Specification

	Relay^{ALERT}™ standard	Relay^{ALERT}™ compact
General		
Dimensions (mm)	427 x 190 x 120	330 x 190 x 120
Weight (kg)	7.19	6.05
Power Supply		
Power supply range	110v / 230v AC	110v / 230v AC
Power supply isolation	1kV	1kV
Power consumption	28W (384 channel unit)	16W (192 channel unit)
Internal UPS	9 hours*	9 hours*
Power available	12v DC 1A	12v DC 1A
Digital Inputs		
Digital input isolation	1kV	1kV
Digital inputs per unit	48 to 384	48 to 192
Total maximum inputs	3072	192
Data Storage		
Internal data storage	1Gb	1Gb
External data storage	1Gb (Removable USB memory)	1Gb (Removable USB memory)
Communications		
Local (Low speed)	Isolated RS485	Isolated RS485
Local (High speed)	Two USB	Two USB
Modem	PSTN or GSM	PSTN or GSM
Networking	10 baseT / 100 baseTX	10 baseT / 100 baseTX



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