

# RDF-ETH: Remote Data Front-end Ethernet



## The right solution for a total control

RDF-ETH (Remote Data Frontend with embedded Ethernet port) is the data collection equipment installed inside transmission and reception sites where you have a DSL connection available. It's the heart and the hands of the Garda remote control system. Uncompromised reliability, versatility and modular structure are RDF-ETH main characteristics. RDF-ETH is the ideal solution whenever you have a DSL connection and a lot of mixed analog and digital data and controls to manage. RDF-ETH can be expanded to manage an incredible amount of data, both physical and software:

- Up to 256 analog inputs (8, 10, 12 or 16 bit resolution), up to 248 digital inputs (onoff), up to 256 relays (digital output) and up to 32 x 10bit resolution analog outputs. They are configurable, both locally and remotely, and are programmable to generate alarms or run simple routines, called macros. Furthermore, the I/O state can be read, both on site and remotely, at any time.
- Direct RS485 SW connection with third party equipment using ANTLAN RS485 protocol or via ANT Protocol Bridge (ANT130)
- Direct SNMP SW connection with third party equipment interfaced with SNMP to ANTLAN<sup>®</sup> Proxy (ANT 137). Analog inputs have 6 programmable thresholds: 2 alarms, 2 pre-alarms and 2 record thresholds for historical recording.

Contact closure inputs can be set as open or closed. The optically isolated RS485 interface, together with I/O expanders and ANT universal protocol bridge, can connect practically any kind of third party equipment, making RDF-ETH the ideal partner of broadcasters, where many kind of old and new equipment are used without de facto any interface standard. Alarms are sent immediately to the control center software, the NetPOD, which will activate warning procedures via SMS, phone calls, and e-mail according to timelines, responsibility, area, etc. Should the control center not be momentary in reach of the remote system, RDF-ETH main memory will store a queue of 500 alarms to grant the RDF-ETH with a long off-line autonomy.



The connection to the control center will use the DSL connection, while an optional backup media can be set in active standby, and automatically switched to in case of failure of the main communication media.

