

Press Release

Control machines via radio communication, and save cable



The IRIS I/O – module monitors and controls machines in the network

TRL Funkssysteme GmbH – specialist for data radio systems – presents the IRIS I/O module, its latest industrial radio module for the monitoring and control of machines. The IRIS-I/O data radio modules provide bidirectional radio communication and have a reach of up to 1,000 m. They work on the 433 MHz band at a bit rate of 4,800 bits/s, and are designed for medium data volumes. They therefore provide a cost-efficient solution for many applications. IRIS provides particular time and cost benefits when a larger number of machines or sensors are widely spread and are to be triggered centrally. The I/O modules can be individually configured and thus ideally adapted to the respective circumstances, and are mounted to the C/F rail in the switch cabinet.

The IRIS I/O module can be applied in a variety of ways in industry and house technology. The module is used, for example, for gate control through to communication between machines (M2M). For house technology, for instance, gates or air-condition units can be monitored and triggered centrally, and power and water metres read remotely. The I/O module can send malfunction messages and current measuring data automatically. Via the IRIS network, messages can be sent automatically via SMS or email to the respective staff responsible. Settings can be conveyed in the other direction via the IRIS network, and are implemented by the I/O module for machine control. The IRIS I/O renders special applications possible in the logistic processing of stocks and automated transport systems. IRIS radio modules are also used in the vending business to provide remote assessment of the filling levels and other messages from vending machines. Mobile components of transport systems or containers are monitored and triggered in the logistics field.

A radio solution with IRIS I/O modules is more price-efficient than GSM solutions in terms of acquisition as well as operation, and this solution is far superior to Bluetooth technology in terms of reach. You can have an IRIS radio system simply retrofitted into many systems. No additional control cables need to be installed. Even plant units further away can be integrated easily. Mobile components of transport systems or containers are monitored and triggered via IRIS. Since the modules can be individually configured via software, practically every concept can be realised with minimum effort.

The IRIS I/O module has 6 inlets which can be configured in analogue or digital mode. 4 digital outlets are available to control the machines. The inlets are scaleable so that sensor values can be converted into the correct units in the IRIS I/O module. The module has timers, counters and flags. Each inlet has two limiting values. When these are exceeded, the unit reacts with an appropriate message. It can, for example, give off a warning signal, if a prescribed temperature level is not reached or is exceeded. Depending on the configuration, messages can also contain specified texts and parameters. The data is collected by an IRIS central module and can be passed on via the internet. The unit is very compact, with dimensions of 100x100x25mm.

Further information is available at www.trlfunk.de