



AMEREX - 30114 Fire Panel Interface

30114 Fire Panel Interface

AMEREX Integrated 30114 Fire Panel Interface (FPI) module is one of a range of base units provided by AMEREX Integrated that can be connected easily to most fire detection systems by using its three output services.

AMEREX Integrated 30114 employs innovative ideas and technologies to provide the best possible mesh platform for the user and providing a FM approved fire detection system with mesh capabilities.

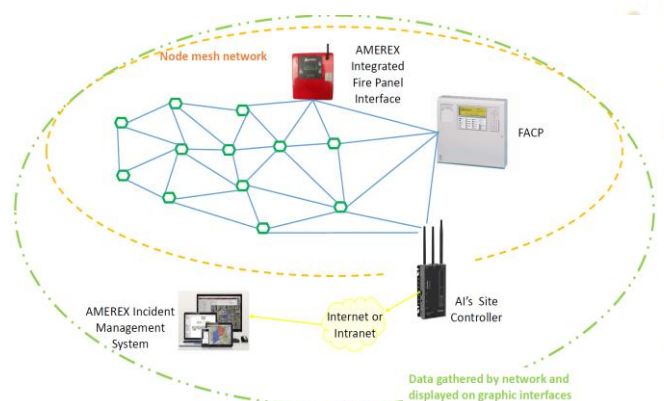
The 30114 is an IEEE 802.15.4, low-power, highly reliable solution for embedded wireless control and monitoring networks requiring high data rates.

AMEREX Integrated (AI) 30114 employs SNAP OS, the industry's first internet-enabled, wireless mesh network operating system, into the Atmel ATmega128RFA1 single-chip AVR® microcontroller with an integrated transceiver that delivers up to 2Mbits/sec.



Benefits AT A GLANCE:

- 3 x Digital outputs (Trouble, Supervision and Buzzer) 35v d.c. max 2Amps
- 1 x Visual display (2 line 16 character display)
- 1 x Command keypad
- 1 x Additional memory
- 1 x Audible alarm
- 24v d.c. / 250mAmps from a FM approved power supply or FM Approved FACP.
- Transmit Power output up to +20 dBm
- SNAP mesh enabled (2.4GHz, IEEE 802.15.4)
- RF Data rate up to 2Mbps
- Mesh networking (2.4GHz)
- -10°C to +49°C operating temperature



AMEREX—30114

SNAP OS on-board Python interpreter provides rapid application development and over-the-air programming, while Atmel's low-power RF single-chip design saves board space and lowers power consumption. The modules provide up to 15 channels of operation in the ISM 2.4GHz frequency band.

By default, the 30114 operating system automatically forms a mesh network with other nodes immediately on receiving power. No further configuration is necessary. AMEREX Integrated 30114 module has been especially designed for ease of use and to provide the user with a stable mesh network.

AMEREX Integrated Fire Panel Interface (FPI)			
Display	Network Condition	Action	Output to FM panel
Green	No issues	No action required	No output
Flashing Red	Alert Issue	To be acknowledged by the FPI	Output latched*
Steady Red	Alert Issue	Alert has been acknowledged	Output latched*

* the latched outputs from the FPI (Trouble, Supervisory or Alarm) will not be released until the network issue has been resolved

The 30114 provides three digital outputs for 'Trouble and 'Supervisory' conditions.

The 30114 provides a visual output via the two line 16 character display giving visual indications to the user of any issues with AMEREX Integrated mesh network. The command keypad provides the capability of interrogating the FPI for faults on the network. The display has three states of visual indication, steady green, flashing red and steady red.

The steady or flashing red display indicates the alarm condition circuitry in the FPI has informed the FM approved fire panel there is an issue on the network ('Trouble' or 'Supervisory' condition). The FPI will not release the alert condition until the issue on the mesh network has been resolved. The 30114 also provides on-board memory for the storage of alarm conditions, which can be viewed at a later date. The command keypad provides acknowledgement of alarms, reset facility and silence functions.

