The M2M IoT Elevator Remote Monitoring system allows elevator systems to be remotely monitored over the Internet, using 3G/4G wireless connection, or an existing Internet site connection if available.

Status signals available in the Plant Room can be remotely monitored, including Elevator Car movement, floor location, door condition and alarms. Drive system status, performance and alarms can be monitored. Status signals in the Elevator Car can be remotely monitored by wireless signalling from the Car to the Elevator Monitoring Base Station. Indicators or audible alarms in the Car can be remotely controlled via the wireless connection.

WIRELESS INTERNET CONNECTIVITY
Use of 3G/4G wireless data connection allows multiple locations over a wide geographic area to be connected to central monitoring locations anywhere that an Internet connection is available, including mobile devices such as Smartphones or Tablets.

WIRELESS ELEVATOR CAR CONNECTION
Wireless local connection to Elevator Cars allows monitoring of status from the Elevator Car, including alarms or safety monitors, user interface buttons etc. Indicators or audible alarms in the Elevator Cars may be controlled over the Internet, using the local wireless network to connect to the Elevator Cars.
CHARACTERISTICS

PLANT ROOM MONITORING
- Multiple shafts and cars
- Car floor, doors open/closed, alarms
- Technician on site keyswitch/RFID
- 2 to 16 or more voltage free contacts
- Up to 16 opto-isolated digital inputs
- Up to 4 analog sensors
- Up to 4 digital sensors
- Solid state relays
- 2 RS-485 ports
- Modbus/Modbus TCP
- CAN Bus
- USB
- Ethernet with PoE – Surveillance camera
- Other interfaces & protocols on request

ELEVATOR CAR MONITORING
- Pushbuttons/contact closures
- Sensors and alarms
- Indicator and audible alarm control
- 4 A/D input channels, 0 to 3V3
- 2 D/A output channels, 0 to 3V3
- 2 Solid state relay outputs, 30V 1.2A
- Up to 9 GPIO lines, 0 to 3V3
- I2C and SPI ports, 0 to 3V3

INTERNET CONNECTIONS
- 3G/4G cellular data connection
- WiFi – networks and mobile devices
- Ethernet to existing Internet connection
- SMS and email alerts

CAR WIRELESS NETWORK
- IEEE 802.15.4 full mesh network
- 6LoWPAN IPv6 enabled stack
- Supports drop-in, drop-out, PnP

PHYSICAL
- Plant Room Internet Gateway - 300x400x180mm
- Elevator Car Module – 165x125x75mm

ENVIRONMENTAL
- Temperature (operating): -15°C to +55°C
- Temperature (survival): -55°C to +85°C
- Humidity (operating): 95% RH at 50°C

POWERING
- Plant Room Internet Gateway – 110 to 240VAC
- Elevator Car Module – 110 to 240VAC

REMOTE MONITORING INTERFACE
- Real-time status
- Car floor, doors, status, alarms
- Customisable on request