EkkoHub
Wireless Data Receiver

The EkkoHub wireless data receiver can receive measurement data from up to 500 wireless EkkoSensors at greater than 25m distance. This data is forwarded to the cloud based EkkoSoft® Critical visualisation and analysis software.

The EkkoHub can operate with an EkkoLink as an on-site data aggregator or can be configured to communicate directly with EkkoSoft Critical - ideal for smaller sites.

The EkkoHub is compatible with all members of the Critical Things® sensor family; temperature and humidity sensors (THX, TDX), wireless EkkoAirs and EkkoCTs.

EkkoHubs can be powered by Power over Ethernet or from a local 5V DC supply. Four LEDs on the front panel provide real time status information.

EkkoHubs radio interface is encrypted with 128 bit AES to match the Critical Things® sensors. TLS is used to protect data on the wired interface.

In the default operating mode multiple EkkoHubs connect to an on site EkkoLink which provides local data aggregation and storage and handles secure connectivity with EkkoSoft.

An EkkoHub can be quickly reconfigured into 'EkkoSoft Direct' mode. It then connects directly to EkkoSoft without the need for an EkkoLink. In EkkoSoft Direct mode the EkkoHub can use the second Ethernet port to accept data from another EkkoHub and acquire data from Modbus/TCP and SNMP devices for energy monitoring and alarming functionality. This makes it the ideal solution in smaller sites.

The EkkoHub can be mounted on any flat surface using the separate mounting plate, ensuring installation is fast and tidy. Alternatively, with an adapter accessory it can be DIN rail mounted.

The EkkoHub has an internal antenna which provides excellent performance in most situations. A conversion kit is available to allow an external antenna to be used where necessary.

In EkkoSoft Direct mode the EkkoHub is well suited to installations with up to 200 Critical Things Sensors and up to 20 Modbus/SNMP devices.

In addition to European and North American regulatory approval the EkkoHub is approved for use in a growing list of other countries. Contact EkkoSense for the latest information.

Critical Things®
INTEGRATED SENSOR TECHNOLOGY

PARAMETER	VALUE
Operating environment	0°C to 40°C (32°F to 104°F) ambient 5% to 90% relative humidity
Weight	410g (14.5oz)
RF data link	GFSK 250kbit/s at 868.3MHz (ES version) or 923MHz (FS version). GFSK at 100kbit/s at 919.8MHz (AS version)
Operating distance (from EkkoSensors)	> 25m (27yds) (>15m in Japan)
Dimensions	193mm x 136mm x 53mm (7.6" x 5.4" x 2.1")
Enclosure	ABS
Mounting method	Separate bracket with two fixing holes. EkkoHub twists and locks onto bracket. Option for DIN rail mount.
Regulatory approvals (ES version)	Radio - EN 300 220-2 V3.1.1 EMC - EN 61326-1 and EN 301 489-3 Safety - IEC 62368
Regulatory approvals (FS version)	Radio - FCC CFR 47 Part 15C, ISED RSS-210 EMC - FCC CFR 47 Parts 15.107 and 15.109, ICES-003
Power supply	IEEE802.3af Power over Ethernet or 5V DC 2.5A

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