Technical Datasheet

Edge Hub 2.0

Edge Hub 2.0

Edge Hub 2.0 is the 4th generation wireless controller and IoT access point for properties. With two operational modes it can either act as a smart AI enabler, oversteering any heating controller for a perfect indoor climate using minimal amount of energy – or it can simply act as a wM-Bus gateway for any OMS compliant sensor or meter.

When used in oversteering mode the Hub continuously receives instructions from the self-learning AI algorithms, unique for the specific property, always optimized and up to date.

Unparalleled scalability and rapid rollout for building portfolio digitalization is achieved by the provided easy to use deployment tools supporting scanning of QR codes and step by step guidance.

New features of Hub 2.0

- LTE/4G connectivity.
- Dual wM-Bus receivers for simultaneous reception of C/T and S mode.
- Use with any brand of sensors or meters that are OMS compliant.
- Next generation module with faster processor, more RAM and flash memory.
- Easier troubleshooting and thus more efficient support in case of problems in your heating station.

Kiona

Technical Datasheet

Edge Hub 2.0

FIELD OF USE

- Residential, commercial and public buildings.
- Independent digitalization of buildings.
- Optimization of energy use.
- Remote control of heating systems.

MAIN FUNCTIONS

- Collecting data from wM-bus Sensors.
- Dual wM-Bus receivers for simultaneous reception of C/T and S mode.
- Transmission of energy balance control temperature Teq.
- Measurement of outdoor temperature and forecast calibration.
- Use any wM-Bus outdoor temperature sensor for flexible and fail-safe operation.
- Operates stand alone and connects over the 2G, 3G or 4G Network.
- Wide operating range and coverage without repeaters.
- Secure operation and plug and play activation via QR code.
- Requires no batteries and no external antennas.

PERFORMANCE

The Edge Hub uses a high-performance wireless M-Bus receiver module that supports C1, T1 and S1 mode. Long Range and high sensitivity is achieved by using the latest technology in radio transceivers. The performance in an urban environment where there are lots of radio disturbances from mobile phones, is guaranteed using high performance filtering.

MOUNTING

- If used for steering, mount always on exterior wall, preferred location N or NW.
- Avoid mounting close to heating/cooling sources for example solar radiation, ventilation outlets, Air conditioning systems etc.
- If used as a wM-bus gateway the unit may be installed in various locations, such as an apartment, stairway, attic, or rooftop.
- If placed outside, mount the Edge Hub unreachable from ground location, approx. 3m above ground.

WIRELESS M-BUS

Standards	EN 13757-3/4:2018 OMS 4.1.2
Modes	C, T, and S-mode.
Capacity	1000 sensors or meters
Frequency	868.3 AND 868.95 MHz
Sensitivity	-111 dBm C/T/S mode
Antenna	External, Dual receivers

GSM /LTE

Sensitivity	-107 dBm
Supported	2G/3G/4G
Sim Card	Embedded SIM
Antenna	Internal

GENERAL

Power supply	230VAC 50Hz / 18VDC Adaptor
Energy consumption	Max 0,25W (Annually 2,2kWh / 7,9MJ)
Operating Range	Guaranteed - 40°C ... +125°C
Temperature sensor	- 50°C ... +50°C Accuracy ±0,5°C
Measure interval	Every minute
Resolution	One decimal
Output	Resistance 68ohm ... 9Mohm, 14Bit res Pt1000, Ni1000, Ni1000LG NTC(TAC), Honeywell, NTC 1/2,2/10/20 and many more.
RoHS	2011/65/EU
Radio	EN300220-2, EN301908-1, EN301511
EMC	EN55032:2015, EN55035:2017, EN 301 489-1/3, EN301489-52
Safety	EN62368-1
Enclosure	IP64 White plastic Contains no Bisphenol-A
Weight	300g
Size (WxHxD)	260 x 85 x 47 mm
Article number	10125 (1107)
Disposal notes	When disposed of, the Edge Hub shall be recycled and not disposed with domestic waste.

Kiona