

Data sheet

READy Concentrator Wireless M-Bus, C mode

- Intelligent all-in-one Wireless M-Bus concentrator
- Designed for wireless collection of data from consumption meters and sensors
- Standardised radio communication according to EN13757-4:2013
- Supports the highest security level (individually encrypted meters and sensors)
- Handling of hourly values for up to 10,000 Wireless M-Bus meters and sensors
- Built-in TCP/IP
- Possibility of 2G(GPRS)/3G
- Saves data for up to 30 days
- Plug-and-play installation



Content

Part of READy Suite	2
Technical data	3
Mechanical data	4
Suggested installations	7
Markings	8
Order data	8

Part of READy Suite

READy Concentrator is the central network component which makes up the infrastructure in a READy fixed network.

Its first priority is to collect metering values from installed Wireless M-Bus meters and sensors and forward data to READy Manager (the superior meter data management system [MDM]) via a wired or wireless internet connection. READy Concentrator supports the reading of Kamstrup Pressure Transmitter. It is possible to read data from priority meters/sensors and transfer data to READy Manager at intervals of down to every 5 minutes.

READy Concentrator is designed for outdoor installation and is easily installed by means of the built-in bracket on the back. When installed outdoors, Radio Concentrator must be installed in a suitable outdoor cabinet.

When installed outdoors in extreme environments, e.g. in chimneys of the utility or other installations located at high elevations, READy Concentrator is installed in a stainless steel cabinet with built-in heating element partly for securing optimal radio coverage, partly for achieving the optimal operation conditions in any weather conditions.

Technical data

Capacity

Up to 10,000 Wireless M-Bus meters.

Frequency

EU licence free frequency bands from 868 - 870 MHz
 (C1 mode, 868 MHz, one way communication)

Communication

Wireless M-Bus, C1 mode

Standards

EN13757-3:2013

EN13757-4:2013

Transmission intervals

READY Concentrator automatically receives meter data from the READY network either every 16 seconds or every 96 seconds depending on the installed meter types.

Supply

110/230 VAC/50-60 Hz (built-in Switch Mode Power Supply)

Recommended supply cable 2 x 0.75 mm²

Current consumption:

Ethernet 6 W

2G/3G idle 6.4 W

2G/3G transmission 11.2 W

Heating element +30 W (steel box)

Range

Up to 500 m (READY Concentrator installed with whip aerial antenna or panel antenna at a low level on small mast and rooftop).

Typically up to 2,000 m (READY Concentrator installed at a high level with High Gain antenna).

Your range depends on the installation site and the surroundings.

For more information on the Kamstrup Wireless M-Bus radio, consult the installation guide for Kamstrup Wireless M-Bus radio network on products.kamstrup.com.





Mechanical data

Stand-alone solution

<p>READy Concentrator – stand-alone</p> <p>Dimensions (H x W x D) 210 x 168 x 64</p> <p>Weight 1 kg</p> <p>Temperature range -40 °C...+ 70 °C</p> <p>Supported meters</p> <p>Kamstrup water and heat/cooling meters with Wireless M-Bus communication</p>	 <p>The image shows a rectangular, light-colored metal enclosure for the READy Concentrator. It has a hinged door on the left side. The front panel features the 'kamstrup' logo in red at the bottom left and the text 'READy Concentrator' in the center. Below the front panel, there are five black circular ports or connectors.</p>
<p>Wireless M-Bus OMNI whip aerial antenna – outdoors (Ordering number: 6697 032)</p> <p>Frequency range 825 – 890 MHz</p> <p>Amplification (gain) 5 dB</p>	 <p>The image displays a long, thin, silver whip antenna with a red and black tip. Below the antenna, there is a yellow metal mounting bracket and a small black cable with two connectors.</p>
<p>Wireless M-Bus OMNI panel antenna – outdoors (Ordering number: 6697 033)</p> <p>Frequency range 860 – 930 MHz</p> <p>Amplification (gain) 8 dB</p>	 <p>The image shows a square, white panel antenna with a central circular element.</p>
<p>Wireless M-Bus OMNI panel antenna – indoors (Ordering number: 6697 034)</p> <p>Frequency range 800 – 880 MHz</p> <p>Amplification (gain) 7 dB</p>	 <p>The image shows a rectangular, white panel antenna with a small circular element on the front and a connector on the side.</p>
<p>Super low loss antenna cable with N-connector/male connector stand-alone (Ordering number: 5000 355/363)</p> <p>Length 10/20 m</p>	 <p>The image shows a coiled black cable with an N-connector on one end and a male connector on the other.</p>

Mechanical data

Outdoor solution

<p>READY Concentrator in outdoor cabinet</p> <p>Dimensions HxWxD] 400x200x135 mm</p> <p>Weight 5.4 kg</p> <p>– incl. mounting bracket 7.0 kg</p> <p>Protection class IP44</p> <p>Temperature range -40 °C...+70 °C</p> <p>Switch/fuse C10/10A</p> <p>Supported meters</p> <p>Kamstrup water and heat/cooling meters with Wireless M-Bus communication.</p>	
<p>Wireless M-Bus OMNI whip aerial antenna – outdoors (Ordering number: 6697 032)</p> <p>Frequency range 825 – 890 MHz</p> <p>Amplification [gain] 5 dB</p>	
<p>Wireless M-Bus large OMNI whip aerial antenna – outdoors (Ordering number: 6697 037)</p> <p>Frequency range 825 – 890 MHz</p> <p>Amplification [gain] 5 dB</p>	
<p>Wireless M-Bus OMNI panel antenna – outdoors (Ordering number: 6697 033)</p> <p>Frequency range 860 – 930 MHz</p> <p>Amplification [gain] 8 dB</p>	
<p>Wireless M-Bus OMNI panel antenna – indoors (Ordering number: 6697 034)</p> <p>Frequency range 800 – 880 MHz</p> <p>Amplification [gain] 7 dB</p>	
<p>Super low loss antenna cable with 2 x N-connectors/(m) for outdoor cabinet (Ordering number: 5000 398/388/389/390)</p> <p>Length 2/5/10/20 m</p>	

Mechanical data

Heavy duty solution

READy Concentrator in steel cabinet

Dimensions (HxWxD) 400x300x150 mm

Weight 11 kg

Protection class IP44

Temperature range -40 °C...+70 °C

Switch/fuse C10/10A

Wind load (at 150 km/h)

- Frontal 440 N

- Lateral 100 N

- Back 460 N

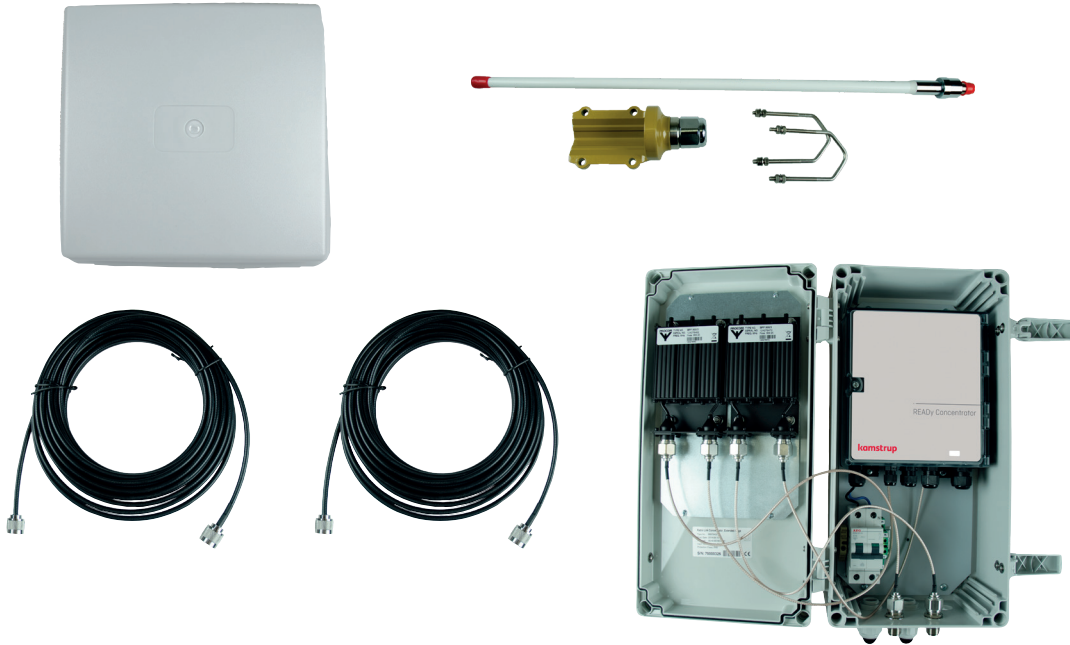
Supported meters

Kamstrup water and heat/cooling meters with Wireless M-Bus communication

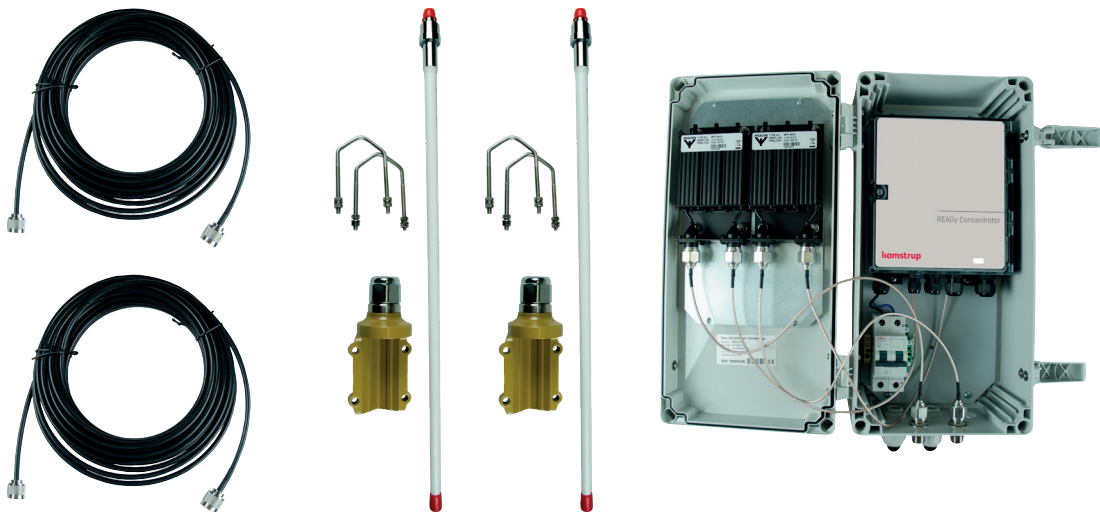


The READy Concentrator in steel cabinet is not a Do-It-Yourself solution, and can only be sold as a part of a Do-It-Together solution. Contact Kamstrup for more information.

Suggested installations



Suggested setup for near readings using the Panel antenna and distance for an omni directional antenna.



Suggested setup for maximum range using two omni directional antennas with distance between them (min. 1 meter) to ensure great coverage.

Markings

R&TTE
CE marked

EN300 220 – class 2, EN301489

Order data

Description	Type no.
Top number: READy concentrator	
- Stand-alone	66961000000
- Outdoor cabinet	66962000000
- Steel box	66963000000
Antennas:	
Wireless M-Bus OMNI whip aerial antenna – outdoors	6697032
Wireless M-Bus large OMNI whip aerial antenna - outdoors	6697037
Wireless M-Bus panel antenna – outdoors	6697033
Wireless M-Bus panel antenna – indoors	6697034
Cables:	
Super low loss antenna cable with N-connector/male connector – stand-alone	
- 10 m	5000355
- 20 m	5000363
Super low loss antenna cable with 2 x N-connectors/(m) outdoor cabinet	
- 2 m	5000398
- 5 m	5000388
- 10 m	5000389
- 20 m	5000390

Kamstrup A/S

Industrivej 28, Stilling
DK-8660 Skanderborg
T: +45 89 93 10 00
F: +45 89 93 10 01
info@kamstrup.com
kamstrup.com