

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 15,000 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



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 15,000 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).

Mechanical data

<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>A rectangular, light grey metal enclosure with a silver-colored front panel. The front panel has the text 'READY Concentrator' and the 'kamstrup' logo in red. On the right side, there are several ports and connectors. The bottom edge features five circular ports.</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>A long, thin, silver whip antenna with red tips at both ends. Below it is a yellow cylindrical component, likely a mounting bracket or connector, and a small metal component with two wires.</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>A square, white, flat 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>A rectangular, white, flat panel antenna with a small circular element on the front face 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>A coiled black cable with an N-connector on one end and a male connector on the other.</p>

Mechanical data

<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 16A/C10</p>	 <p>The image shows a grey outdoor cabinet with its door open. On the left side, there are two fiber optic modules with multiple ports. On the right side, there is a white READy Concentrator unit with the 'kamstrup' logo. Various cables and connectors are visible inside the cabinet.</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 shows a long, thin white whip antenna with red tips. Below it is a yellow mounting bracket with a black connector, 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 connector on the side.</p>
<p>Super low loss antenna cable with 2 x N-connectors/(m) for outdoor cabinet (Ordering number: 5000 388/389/390)</p> <p>Length 5/10/20 m</p>	 <p>The image shows a coiled black cable with two N-connectors at the ends.</p>

Mechanical data

READy Concentrator in steel cabinet	
Dimensions (HxWxD)	400x200x150 mm
Weight	11 kg
Protection class	IP44
Temperature range	-40 °C...+70 °C
Switch/fuse	16A/C10
Wind load (at 150 km/h)	
- Frontal	440 N
- Lateral	100 N
- Back	460 N



Please contact Kamstrup A/S for further information about antennas.

Markings

R&TTE
CE marked

EN300 220 – class 2, EN301489

Order data

Description	Type no.
Top number: READy concentrator	
- Stand-alone	66961000000
- Plastic box	66962000000
- Steel box	66963000000
Antennas:	
Wireless M-Bus OMNI whip aerial antenna – outdoors	6697032
Wireless M-Bus panel antenna – outdoors (frequency range 860 – 930 MHz)	6697033
Wireless M-Bus panel antenna – indoors (frequency range 800 – 880 MHz)	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	
- 5 m	5000388
- 10 m	5000389
- 20 m	5000390

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