kamstrup

Antennas and accessories

Antennas and accessories

Antennas	GSM5i module	GSM5i/RF module	GSM6i module	GSM6i/RF module	GSM6H module	GSM7i module	GSM8i 3G module	GSM8i/RF 3G module	GSM Modem 3	GSM Modem 5	GSM Modem 6	GSM Modem 8 3G	Master Modem	RF module	RF Concentrator	RF Router	RadioRouter module	High Power Radio Router	Wireless M-Bus	Radio Link + READy Concentrator, stand-alone	Radio Link + READy Concentrator, outdoor plastic box	READy Converter	MULTICAL® 21/3100/2101/2102/2103 flowIQ® 2100/2200/3101	Flagpole solution
6699454 Triangle 0.5 m cable (MCX)	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X						
6699459 Triangle 1 m cable (MCX) 45 pcs.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
6699407 Triangle 2.5 m cable (MCX)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
6699455 Triangle 2.5 m cable (MCX) 45 pcs. 6699407	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
6699408 Triangle No cable	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
6699445 Triangle 5 m cable (MCX) 18 pcs. 6699408	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
6699446 Triangle with bracket 5 m cable (MCX) 12 pcs. 6699408	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
6880015 Mini triangle 1 m cable (MCX)	X		X		X	X				X	X	X	X						X					
6699448 Mini triangle 2.5 m cable (MCX)	X		X		X	X				X	X	X	X						X					X
6699484 Mini triangle 1.5 m cable (SMA)																			X[1]	X			X[6]	
6880013 Mini triangle antenna 0.1 m cable (SMA)																			X[1]				X[6]	
6699458 Discos, indoors and outdoors 1.5 m cable (MCX)	X		X		X	X				X	X	X	X											

[1] Requires extension cable (5000 429/441/442/443/444) and adapter cable with connector (5000292)

[2] Requires extension cable (5000 429/441/442/443/444)

[3] With 6699417 + 5000355/363

[4] Requires adapter cable with connector (5000292)

[5] With 6699417

[6] Requires extension cable (5000 429/441/442/443/444 and antenna cable with clamp-on 5000445)

Antennas	GSM5i module	GSM5i/RF module	GSM6i module	GSM6i/RF module	GSM6H module	GSM7i module	GSM8i 3G module	GSM8i/RF 3G module	GSM Modem 3	GSM Modem 5	GSM Modem 6	GSM Modem 8 3G	Master Modem	RF module	RF Concentrator	RF Router	RadioRouter module	High Power Radio Router	Wireless M-Bus	Radio Link + READy Concentrator, stand-alone	Radio Link + READy Concentrator, outdoor plastic box	READy Converter	MULTICAL® 21/3100/2101/2102/2103 flowIQ® 2100/2200/3101	Flagpole solution
S7510020 Discos, outdoors 3 m cable (SMA)	X[4]	X[4]	X[4]	X[4]	X[4]	X[4]	X[4]	X[4]	X	X[4]	X[4]	X[4]	X											
S7510021 Discos, indoors 3 m cable (SMA)	X[4]	X[4]	X[4]	X[4]	X[4]	X[4]	X[4]	X[4]	X	X[4]	X[4]	X[4]	X											
6699449 Magnetic 1.5 m cable (MCX)	X		X		X	X	X			X	X	X	X											
6699465 Cavity wall, GSM 2.5 m cable (MCX)	X		X		X	X	X			X	X	X	X											
6699442 Cavity wall, RF 2.5 m cable (MCX)														X	X	X	X	X						
6880014 Directional, external (SMA (M))	X[1]		X[1]		X[1]	X[1]	X[1]		X	X[1]	X[1]	X[1]	X											
6697032 Omni, outdoors																			X[3]	X	X			
6697033 Panel, outdoors																			X[3]	X	X			
6697034 Panel, indoors																			X[3]	X	X			
6697037 Omni, outdoors, large																			X[3]	X	X			
6697022 Omni, outdoors, large																								X
1653089 Antenna whip, EU (SMA)																						X		
6696011 Magnetic roof, EU (SMA)																						X		
6697900 Pit antenna, EU 2 m cable																							X	
6697901 Pit antenna, EU 7.5 m cable																							X	

1 Requires extension cable (5000 429/441/442/443/444) and adapter cable with connector (5000292)

2 Requires extension cable (5000 429/441/442/443/444)

3 With 6699417 + 5000355/363

4 Requires adapter cable with connector (5000292)

5 With 6699417

6 Requires extension cable (5000 429/441/442/443/444 and antenna cable with clamp-on 5000445)

Antennas and accessories

Antennas	GSM5i module	GSM5i/RF module	GSM6i module	GSM6i/RF module	GSM6H module	GSM7i module	GSM8i 3G module	GSM8i/RF 3G module	GSM Modem 3	GSM Modem 5	GSM Modem 6	GSM Modem 8 3G	Master Modem	RF module	RF Concentrator	RF Router	RadioRouter module	High Power Radio Router	Wireless M-Bus	Radio Link + READy Concentrator, stand-alone	Radio Link + READy Concentrator, outdoor plastic box	READy Converter	MULTICAL® 21/3100/2101/2102/2103 flowIQ® 2100/2200/3101	Flagpole solution
6697926 Pit antenna EU, 2 m cable (KWM223x)																							X	
6697927 Coupler with sma-plug, 0,3 m cable (KWM223x)																							X	

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2 Requires extension cable (5000 429/441/442/443/444)

3 With 6699417 + 5000355/363

4 Requires adapter cable with connector (5000292)

5 With 6699417

6 Requires extension cable (5000 429/441/442/443/444 and antenna cable with clamp-on 5000445)

Accessories	GSM5i module	GSM5i/RF module	GSM6i module	GSM6i/RF module	GSM6H module	GSM7i module	GSM8i 3G module	GSM8i/RF 3G module	GSM Modem 3	GSM Modem 5	GSM Modem 6	GSM Modem 8 3G	Master Modem	RF module	RF Concentrator	RF Router	RadioRouter module	High Power Radio Router	Wireless M-Bus	Radio Link + READy Concentrator, stand-alone	Radio Link + READy Concentrator, outdoor plastic box	MULTICAL® 21/3100/2101/2102/2103 flowIQ® 2100/2200/3101	Flagpole solution
5000291 Adapter (MCX to FME)	X		X		X	X	X		X	X	X		X										
5000292 Adapter (MCX to SMA)	X		X		X	X	X		X	X	X		X						X[2]				
6699417 Converter box	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X				
6699441 Converter box for external antenna[5]	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X					
6699460 Antenna cable 50 m cable	X	X	X	X	X	X	X		X	X	X			X	X	X	X	X	X				
6699483 Super low-loss antenna cable 50 m cable																					X		
6699638 Super low-loss antenna cable for flagpole 50 m cable																							X
5000265 5 m cable (SMA)									X				X										
5000266 15 m cable (SMA)									X				X										
5000355 10 m cable																			X[5]	X			
5000363 20 m cable																			X[5]	X			
5000388 5 m cable																					X		
5000389 10 m cable																					X		
5000390 20 m cable																					X		
5000429 5 m cable (SMA (M) to SMA (F))	X	X	X	X	X	X	X	X	X	X	X	X	X						X[1]			X[6]	
5000441 10 m cable (SMA (M) to SMA (F))	X	X	X	X	X	X	X	X	X	X	X	X	X						X[1]			X[6]	
5000442 15 m cable (SMA (M) to SMA (F))	X	X	X	X	X	X	X	X	X	X	X	X	X						X[1]			X[6]	
5000443 20 m cable (SMA (M) to SMA (F))																			X[1]			X[6]	
5000444 25 m cable (SMA (M) to SMA (F))																			X[1]			X[6]	

[1] Requires extension cable (5000 429/441/442/443/444) and adapter cable with connector (5000292)
[2] Requires extension cable (5000 429/441/442/443/444)
[3] With 6699417 + 5000355/363
[4] Requires adapter cable with connector (5000292)
[5] With 6699417
[6] Requires extension cable (5000 429/441/442/443/444 and antenna cable with clamp-on 5000445)

Antennas and accessories

Accessories	GSM5i module	GSM5i/RF module	GSM6i module	GSM6i/RF module	GSM6H module	GSM7i module	GSM8i 3G module	GSM8i/RF 3G module	GSM Modem 3	GSM Modem 5	GSM Modem 6	GSM Modem 8 3G	Master Modem	RF module	RF Concentrator	RF Router	RadioRouter module	High Power Radio Router	Wireless M-Bus	Radio Link + READy Concentrator, stand-alone	Radio Link + READy Concentrator, outdoor plastic box	MULTICAL® 21/3100/2101/2102/2103 flowIQ® 2100/2200/3101	Flagpole solution
6697145 Extension for external antenna in isolated pit																						X	
6697146 Cover for external antenna, wall-mounted																						X	
5000448 Antenna cable 8 m flagpole																							X
5000449 Antenna cable 10 m flagpole																							X
5000450 Antenna cable 12 m flagpole																							X
5000451 Antenna cable 14 m flagpole																							X
5000452 Antenna cable 16 m flagpole																							X
5000512 Antenna cable 18 m flagpole																							X
6697907 Bottom for antenna with fittings																						X	
6697908 Tool kit for installation																						X	
6697910 Earth spear																						X	
6697911 Top for mounting antenna type 6697143																						X	
6697906 Antenna mount																						X	

1 Requires extension cable (5000 429/441/442/443/444) and adapter cable with connector (5000292)
2 Requires extension cable (5000 429/441/442/443/444)
3 With 6699417 + 5000355/363
4 Requires adapter cable with connector (5000292)
5 With 6699417
6 Requires extension cable (5000 429/441/442/443/444 and antenna cable with clamp-on 5000445)

Antennas and accessories

Antennas	Comments
Triangle antenna	Kamstrup's Triangle antenna is an extremely robust all-round smart metering antenna with a wide frequency spectrum that can be used for both meters, network components and wireless point-to-point units, e.g. 2G/3G modem modules.
	The Triangle antenna is used when there is a need for increased range to ensure optimal data transfer between the meter and the network and can be installed both indoors and outdoors.
	The Triangle antenna is easily installed in the meter without using any tools and vertically with 2 screws as high as possible on a plane base.
	The antenna can be supplied without antenna cable, with 0.5 m RG174 antenna cable, with 2.5 m RG174 antenna cable and MCX connector, ø 3 mm or with 5 m RG58 low-loss antenna cable, ø 5.5 mm.
	Frequency ranges: 434/444/900/1800 MHz
6699454 **6699407** **6699455**	With 0.5 m cable MCX (M) connector With 2.5 m cable MCX (M) connector 45 pcs of 6699407	
6699408	OPTIONAL: 5 m cable with SMA adapter (5000265) 15 m cable with SMA connector for GSM Modem 3 (5000266) Converter box (6699417) and antenna cable (6699460/5000355/5000363)	
6699445	With 5 m cable MCX (M) connector Delivered in boxes of 18 pcs Consists of: 6699408, 5000265, 5000292	
6699446	With bracket and 5 m cable MCX (M) connector Cable/bracket (12 pcs) Consists of: 6699408, 5000265, 5000292 + bracket	

Antennas	Comments	
Mini triangle antenna **6699448** **6699484** **6880013**	This is Kamstrup's best 2G/3G antenna, which can be used for Wireless M-Bus as well. Frequency ranges: 868/900/1800/1900/2100 MHz It can be mounted outdoor or indoor, typically on a wall or metal cabinet. With 2.5 m cable MCX (M) connector With 1.5 m cable, SMA (M) connector * With 0.1 m cable SMA (M) for extension up to 25 m * * to be used with 5000445 + 5000429/5000441/5000442 /5000443/5000444 for water meters or 5000292 + 5000429/5000441/5000442/5000443/500 0444 for heat/cooling meters.	
Disc antenna **6699458**	This GSM antenna can only be mounted on a metal cabinet. Dual-band 900/1800 MHz It can be mounted outdoors and indoors. ø 90 mm With 1.5 m cable MCX (M) connector	
Disc antenna **S7510020**	Outdoor antenna Dual-band 900/1800 MHz ø 92.5 mm With 3 m cable SMA (M) connector Requires adapter cable with connector (5000429)	
Disc antenna **S7510021**	Indoor antenna Dual-band 900/1800 MHz ø 53 mm. With 3 m cable SMA (M) connector Requires adapter cable with connector (5000429)	

Antennas and accessories

Antennas	Comments	
Magnet antenna **6699449**	This GSM antenna can only be mounted on metal. Dual-band 900/1800 MHz It is easy to install, but also easy to remove. Therefore, use this model with care. With 1.5 m cable MCX (M) connector	
Cavity wall, GSM **6699465**	This GSM antenna is designed to be concealed in the cavity wall and is especially convenient when meters are installed in metal cabinets. Only a hole of ø 16 mm is needed for the antenna to get the signal out of the cabinet. With 2.5 m RG316 cable MCX (M) connector	
Cavity wall, RF **6699442**	Dedicated RF antenna This plug-in antenna is a robust smart metering antenna that is often used when the meter is installed in a metal cabinet, and when there is need for increasing the range to ensure optimal data transfer between the meter and the network. The antenna is designed to be concealed in the cavity wall and is especially convenient when meters are installed in metal cabinets. Only a hole of ø 16 mm is needed Frequency ranges: 434/444 MHz With 2.5 m RG174 cable MCX (M) connector	

Antennas	Comments	
Directional external antenna **6880014**	This directional antenna is used in particularly demanding areas with a very poor GSM coverage. Since this antenna is larger than the mini triangle antenna, it is typically used in special cases. Frequency area: 824-960/1710-2170MHz Dimensions: 110x110x200mm (LxWxH) Without cable SMA (M) connector The antenna is typically mounted outdoors on a wall or similar and is turned to pick up the best signal. The antenna is clicked into place to keep this position. It is fitted with an SMA (M) connector and must be used with extension cable (5000429) and SMA to MCX adapter (5000292).	
Omni antenna **For outdoor use** **6697032**	The Omni antenna is intended to be used with a READy Concentrator as an allround purpose reading antenna, e.g. in masts, lower placed installations or outside on buildings. To get the best performance, the omni antenna should be mounted freely, e.g. on top of a pipe or a building, as it receives radio signals in a 360 degree circle. Also note: the higher installation – the better performance. The Omni antenna is a very good alternative to the high-gain antennas, it has a 5 dB gain and is delivered with a bracket for wall and pipe installation. It is equipped with an N-connector and can be used with antenna cables 5000-355/363/398/388/389/390 with cable lengths from 2 to 20 m. Frequency area: 825 – 890 MHz	
Panel antenna **For outdoor use** **6697033**	The Outdoor panel antenna is intended to be used with a READy Concentrator, installed in masts, lower placed installations or outside on buildings. To obtain the best performance, the outdoor panel antenna must be placed pointing towards the meters as this is a directional antenna. The outdoor panel antenna is a very good alternative to the high-gain antennas, it has a 8 dB gain and is delivered with a bracket for wall and pipe installation. It is equipped with an N-connector and can be used with antenna cables 5000-355/363/388/389/390/398 with cable lengths from 2 to 20 m. Frequency area: 860 – 930 MHz	

Antennas and accessories

Antennas	Comments	
Panel antenna For indoor use **6697034**	The indoor panel antenna is intended to be used with a READy Concentrator e.g. inside high rise-buildings. The best performance is achieved when the indoor panel antenna is installed on the ceiling pointing downwards. It then reads the meters on the stocks below. Note that the performance is dependent on the material in the stock separations. The indoor panel antenna is a very good alternative to the high-gain antennas, it has 7 dB gain, and as the installation is very simple, there is no need for a bracket or any extra products. It is equipped with an N-connector and can be used with antenna cables 5000-355/363/388/389/390 with cable lengths from 2 to 20 m. Frequency area: 800 – 880 MHz	
Omni antenna For outdoor use, large **6697037** **6697022**	The Omni antenna is intended to be used with a READy Concentrator for long range readings, e.g. in masts or outside on high rise-buildings. To get the best performance, the Omni antenna should be mounted freely, e.g. on top of a pipe or a building as it receives radio signals in a 360 degree circle. Also note: the higher installation – the better performance. The Omni antenna is a very good alternative to the high-gain antennas, it has a 5-8 dB gain and is delivered with a bracket for wall and pipe installation. It is equipped with an N-connector and can be used with antenna cables 5000-355/363/388/389/390/398 with cable lengths from 2 to 20 m. Frequency area: 825 - 890 MHz Frequency area: 825 - 890 MHz (without bracket - for flagpole solution)	

Antennas	Comments	
Antenna whip, EU **1653089**	Antenna whip for READy Converter Frequency area: 865 – 868 MHz SMA (M) connector	
Antenna whip, US **5005001**	Antenna whip for READy Converter Frequency area: 912.5 – 923 MHz SMA (M) connector Reverse polarity	
Magnetic roof antenna, EU **6696011**	Assy, magnetic roof antenna with whip and 3 m antenna cable (6699460) for READy Converter Frequency area: 865 – 868 MHz SMA (M) connector	
External antenna for flowIQ® and MULTICAL® 21 **6697143** **6697144**	865-923 MHz With 2 m cable /6 ft 6.74 For EU / AU / NZ With 7.5 m cable / 22 ft 11.59 Incl. cover for wall-mounting For EU / AU / NZ	

Antennas and accessories

Antennas	Comments	
Pit antenna **6697900**	2 m cable with clamp-on for MULTICAL® 21 and flowIQ® 3100 (EU)	
6697901	7.5 m cable with clamp-on for MULTICAL® 21 and flowIQ® 3100 (EU)	
6697926	2 m cable with clamp-on for both MULTICAL® 21, flowIQ® 3100, flowIQ® 2200 +3200	

Antennas and accessories

Accessories	Comments	
Antenna adapter **5000291**	The antenna adapter is used for antennas with mounted FME plug, which makes it fit the small MCX plug placed on the module. A GSM antenna bought in a shop is usually delivered with an FME plug. Therefore, this adapter is mostly used for antennas purchased from other suppliers than Kamstrup. MCX for FME, 0.3 m	
Antenna adapter **5000292**	This antenna adapter is used for antennas with mounted SMA plug, which makes it fit the small MCX plug placed on the module. It is used e.g. for the directional antenna or antennas purchased from suppliers other than Kamstrup. MCX to SMA, 0.3 m	
Converter box **6699417** **6699441**	Box used for connecting a thin antenna cable to a thick cable. The thin cable of 1.5 m is provided with an MCX plug and should be mounted on the module. The thick cable is to be purchased separately. Box and thin cable Box	
Antenna cable **6699460** **6699483** **6699638**	Kamstrup RG58 antenna cable For Radio Network Length: 50 m Without connector Multi-purpose antenna cable Super low-loss antenna cable for outdoor concentrator boxes Super low-loss antenna cable for flagpole solution	

Accessories	Comments	
Antenna cable **5000265** **5000266**	Antenna cable in measured length. One end should be mounted directly in the Triangle antenna 6699408. The other end has an SMA plug mounted. Lengths: 5 m 15 m If the cable is to be used together with a module with SMA plug, use either: Converter 6699417 or adapter 5000292	
Antenna cable **5000355** **5000363**	Super low-loss antenna cable with N-connector (M) For Radio Link Concetrator, stand-alone Lengths: 10 m 20 m	
Antenna cable **5000398** **5000388** **5000389** **5000390**	Super low-loss antenna cable with 2 x N-connectors (M) For READy Concentrator plastic box Lengths: 2 m 5 m 10 m 20 m	
Antenna cable **5000429** **5000441** **5000442** **5000443** **5000444**	Super low-loss SMA extension cable SMA (M) to SMA (F) Lengths: 5 m 10 m 15 m 20 m 25 m	

Antennas and accessories

Accessories	Comments	
Antenna cable with clamp-on for MULTICAL® 21 and flowIQ® **6697927**	Super low-loss antenna cable for MULTICAL® 21 and flowIQ® SMA (F): flowIQ(R)2200 (KWM2210 and KWM223x) EU 30 cm	
Extension for isolated pit **6697145**	Extension for external antenna type 6697143 for flowIQ® and MULTICAL® 21 placed in pit 5 pcs	
Cover for wall-mounting **6697146**	Cover for external antenna type 6697143 for flowIQ® and MULTICAL® 21 mounted on a wall 5 pcs	
Antenna cable for flagpole **5000448** **5000449** **5000450** **5000451** **5000452**	Available in the below lengths 8 m 10 m 12 m 14 m 16 m	

Accessories	Comments	
6697906	Antenna mount for Kamstrup pit antenna. Is used when installation in pit lid is not possible.	
	Length: 123 cm	
	Consists of:	
6697907	Bottom for antenna, with fittings	
6697910	Earth spear	
Bottom **6697907**	Spare parts for antenna mount: Bottom parts Length: 13 cm	
Tool kit **6697908**	Tool kit for installation of antenna mount.	

Antennas and accessories

Accessories	Comments	
Earth spear **6697910**	Spare parts for antenna mount: Earth spear Length: 110 cm	
Top **6697911**	Top for mounting antenna type 6697143	