Omnidirectional Antennas for Data Communications

800/900 MHz. Omnidirectional Antennas

Omnidirectional antennas are the right choice for situations where you need to be in contact with sources that are in two directions or if you do not know what direction the signals will be coming from. Receiving signals from two wellheads that are in different directions is an example of the former. An example of the latter would be a warehouse environment where a worker with a handheld terminal is moving about the area while sending and receiving data.

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Antenna Selection Criteria

Before you can make an informed antenna selection, you must know the following: What frequency range should the antenna cover? What gain is needed? If you don't know the exact gain you should be able to describe the system using the antennas. For example, how large is the area? What obstructions are in the area; buildings, trees, shelves, walls etc.? You should know how the antenna will be mounted or at least how you would like to mount it. With this information you can eliminate a number of alternatives.

Currently the most popular spread spectrum systems are operating in the 900 MHz range or in the 2.4 GHz range. These are your basic choices for spread. Other data applications take place anywhere from 25 MHz to 5.9 GHz. Some antennas outside of the 900 MHz and 2.4 GHz ranges are found elsewhere in this catalog. If you don't see what you need or have any questions, please call the factory.

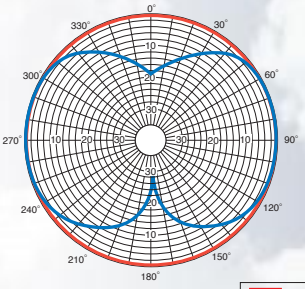
DATA TRANSMISSION OMNIS

- Fiberglass enclosures
- Plated copper laminated radiator
- Weatherproof designs with UltraLink pigtail
- Broadband performance
- DC grounded
- Omnidirectional

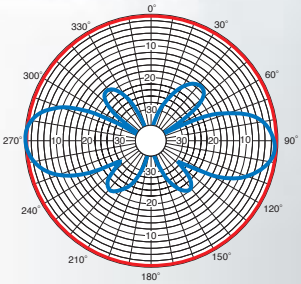
See Squint® series for more Directional antenna solutions, Pages 3-5.

S8064B

S8060B



S8063B



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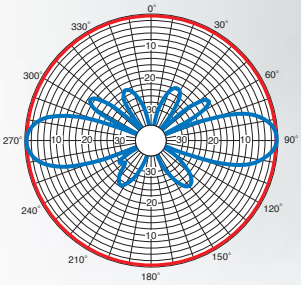
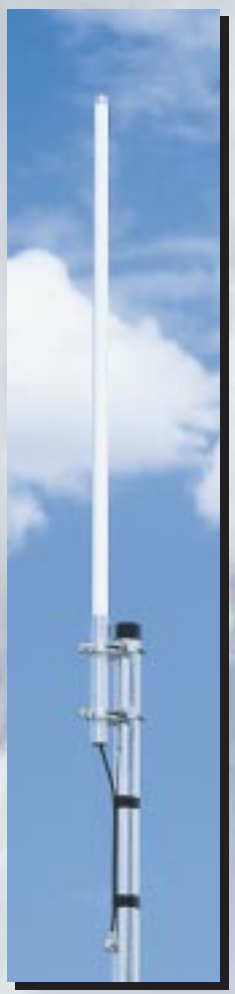


Data Transmission Omnis

Standard Data Transmission Omnis are fully decoupled antennas built on a copper laminate and housed in 0.100 inch wall fiberglass housings. They may be mounted right side-up or tipped upside down depending upon the desired pattern. They also feature a very versatile clamp mounting system that will fit most every situation you will encounter.

S8060B



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800/900 MHz OMNI SELECTOR GUIDE

Model	Freq. MHz	Gain dBd	VSWR (Nominal)	Bandwidth 1.5:1 MHz	-3dB bmwidth E-Plane°	Type (Female)	Height In (cm)	Weight lb (kg)	W/sur Area ft² (m²)	W/survival mph (kph)	Pigtail in (cm)
S8964B	896-960	4	1.5:1	64	25	N	42-1/8 (107)	1.56 (0.70)	0.22 (0.02)	125 (200)	23
S8963B	896-960	3	1.5:1	64	45	N	30-3/4 (78)	1.19 (0.53)	0.176 (0.016)	125 (200)	23
S8960B	896-960	0	1.5:1	64	75	N	17-1/2 (44.5)	0.56 (0.25)	0.083 (0.009)	125 (200)	17
S8804B	880-960	4	1.5:1	62	25	N	42-1/8 (107)	1.56 (0.70)	0.22 (0.02)	125 (200)	23
S8803B	880-960	3	1.5:1	62	45	N	30-3/4 (78)	1.19 (0.53)	0.176 (0.016)	125 (200)	23
S8800B	880-960	0	1.5:1	62	75	N	17-1/2 (44.5)	0.56 (0.25)	0.083 (0.009)	125 (200)	17
S8244B	824-896	4	1.5:1	62	25	N	42-1/8 (107)	1.56 (0.70)	0.22 (0.02)	125 (200)	23
S8243B	824-896	3	1.5:1	62	45	N	30-3/4 (78)	1.19 (0.53)	0.176 (0.016)	125 (200)	23
S8240B	824-896	0	1.5:1	62	75	N	17-1/2 (44.5)	0.56 (0.25)	0.083 (0.009)	125 (200)	17
S8064B	806-868	4	1.5:1	62	25	N	42-1/8 (107)	1.56 (0.70)	0.22 (0.02)	125 (200)	23
S8063B	806-868	3	1.5:1	62	45	N	30-3/4 (78)	1.19 (0.53)	0.176 (0.016)	125 (200)	23
S8060B	806-868	0	1.5:1	62	75	N	17-1/2 (44.5)	0.56 (0.25)	0.083 (0.009)	125 (200)	17

Common Specifications: Power handling -150 Watts; Element material - plated copper laminate; Enclosure material - fiberglass Mounting style - tube end; Maximum mast diameter - 2 in (5.1 cm)