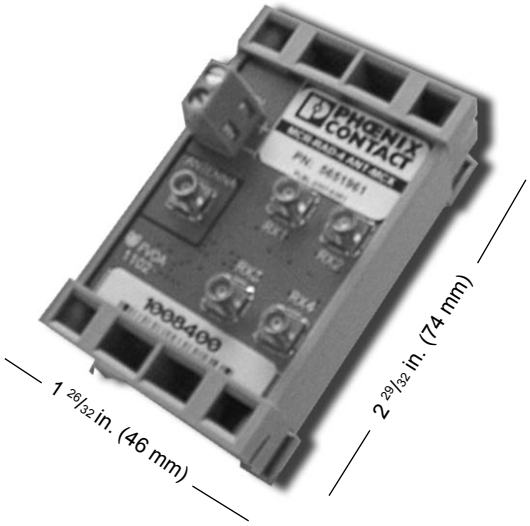
4-Way Antenna Splitter

Data Sheet L001667 August 2003



RAD-ISM-900-ANT-4

Description

The 4-Way Antenna Splitter allows four RAD-ISM-900 receivers to share a single antenna. Designed for use with RAD-ISM-900 receivers, RAD-ISM-900-UD-1TX/2RX-BUS mode (2867571) receivers, which are pre-programmed to receive only. These splitters can also be cascaded together to connect a maximum of sixty-four receivers to one antenna. For best performance when cascading, the signal should not pass through more than three splitters before reaching a receiver. This DIN-rail mount product, with MCX(F) connectors for both the antenna and receivers, will perform amplification and impedance-matching functions, and operates across a broad power supply and temperature range.

Specifications

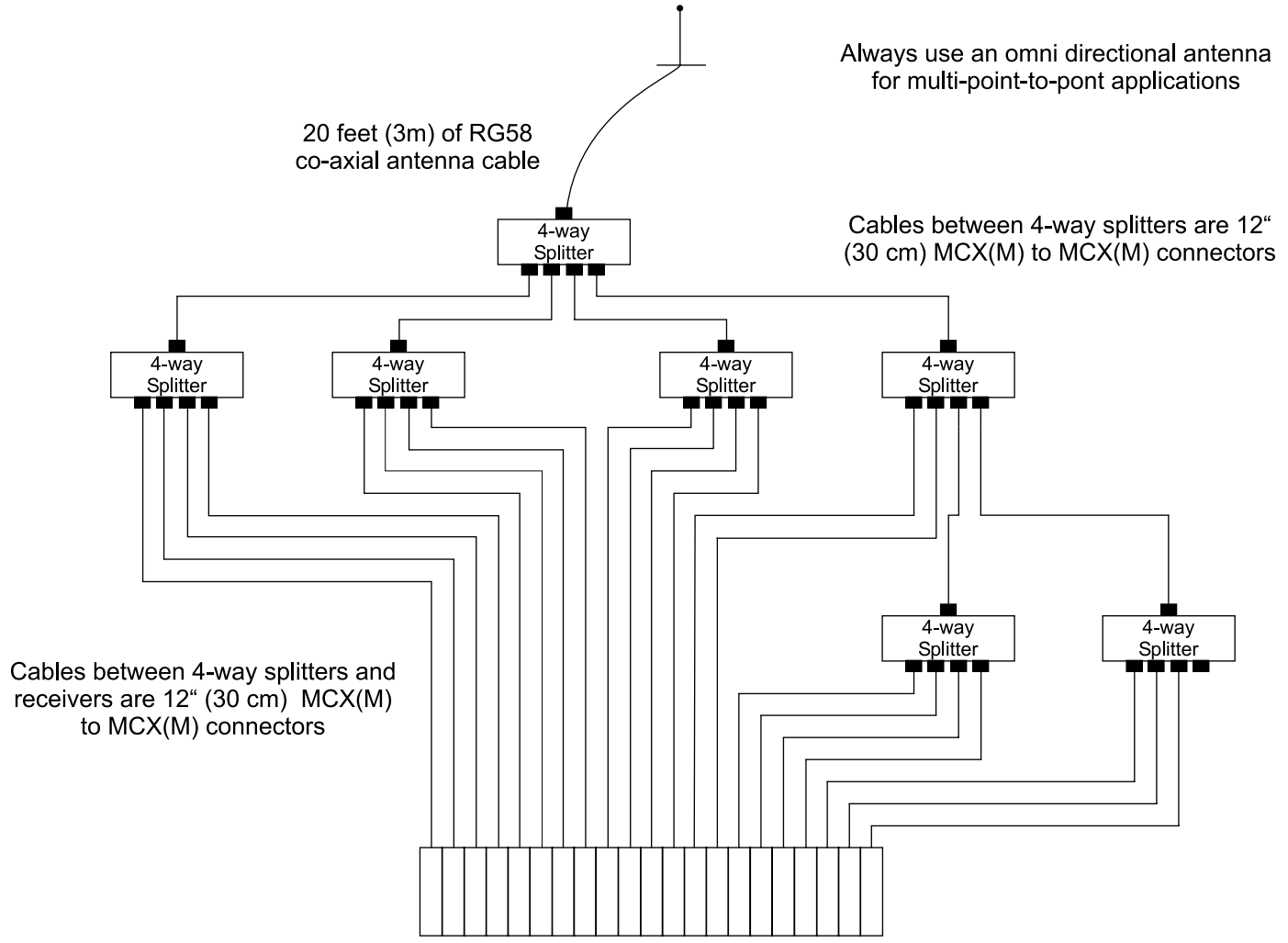
Frequency range	902 to 928 MHz
Insertion loss in bandwidth	0dB (+/-1)
Input impedance	50 ohms
Output impedance	50 ohms
Output isolation	30 dB
Composite noise figure	4.2 dB
Input IP3	3 dB
Absolute maximum input	7 dB
Supply voltage	8 to 30 V DC
Supply current	25 mA
Operating temperature range	-40°F to 190°F (-40°C to 85°C)

Part Numbers

RAD-ISM-900-ANT-4 (2867050)	4-way Antenna Splitter
RAD-CON-MCX-MCX (2867607)	12” (30 cm) adapter cable to connect RAD ISM-900 receiver, RAD-ISM-900-UD-1TX-2RX-BUS receiver, or another 4-way antenna splitter

Phoenix Contact Inc.
P.O. Box 4100 Harrisburg, PA 17111-0100
Phone: (717) 944-1300 Fax: (717) 948-3475 Technical Service: 800-322-3225 E-mail: info@phoenixcon.com

Connection Example Showing Twenty-one RAD-ISM-900 Receivers Connected to One Antenna



Notes:

1. The 4-way splitters require 12-30VDC power.
2. The 4-way splitters can only be cascaded through 3 levels.
3. The RAD-ISM-900 receivers and the 4-way splitters are all DIN-rail mounted and need weather protection.
4. A high gain omni antenna should be used to ensure the radio link with the farthest RAD-ISM-900 transmitter.
5. If longer antenna cable is needed, a higher grade of antenna cable should be used to minimize a cable losses.

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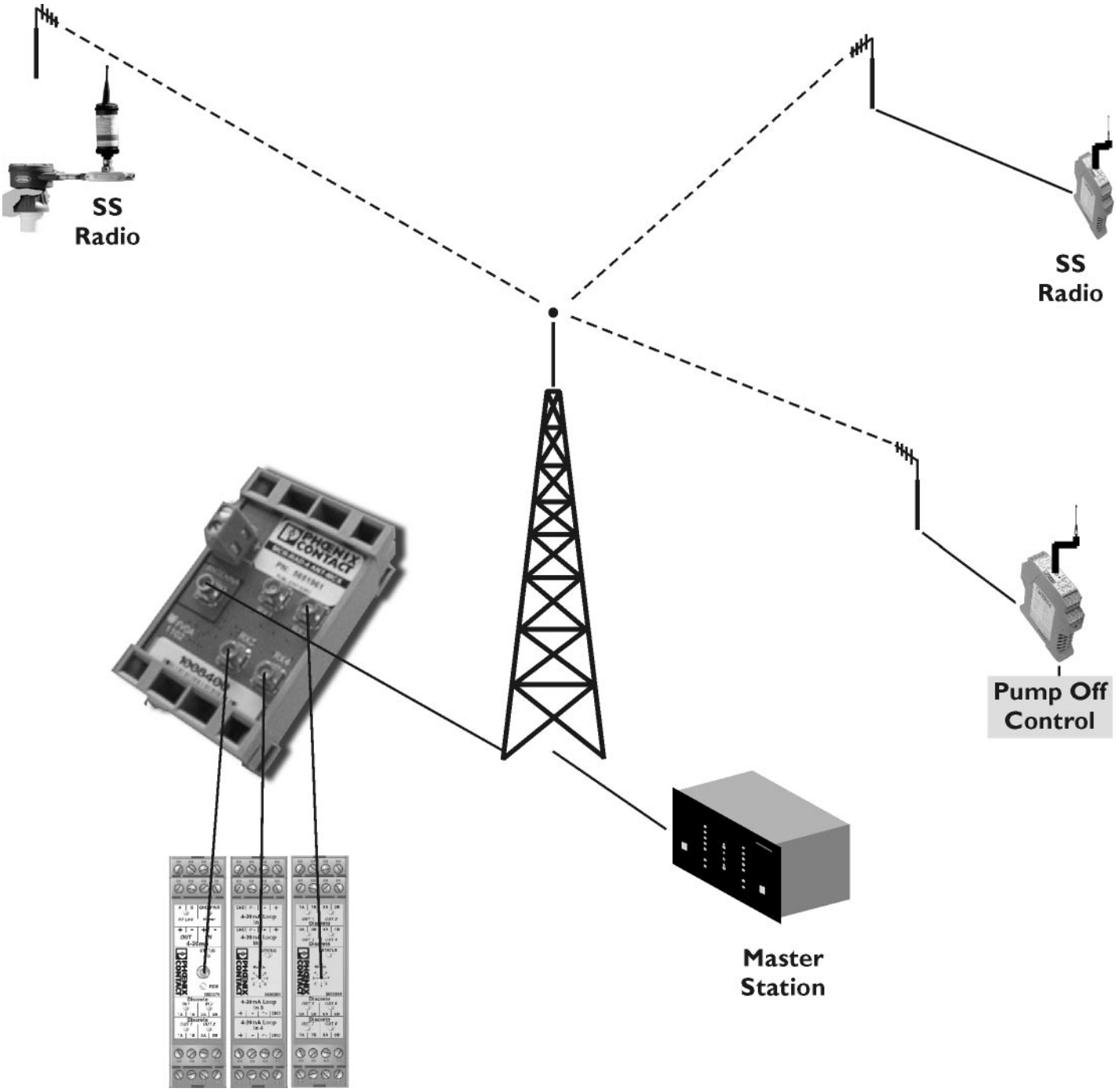
Antenna Splitters for Receivers



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