

RA4-R

Directional UHF sidemount dipole corner reflector antenna UHF 410-510 MHz



The ZCG Scalar RA4-R is a broadband UHF corner reflector antenna optimised for low PIM performance across 410–510 MHz. Delivering 10 dBd gain with a 500 W power rating, 4.3-10 female connector, and a fully welded open-grid design, it ensures durability with reduced wind loading. Ideal for directional critical communication systems in public safety, defence, and emergency services, the RA4-R provides reliable performance in mission-critical environments.

Mounting hardware, coaxial feeder cable, connectors and other installation accessories are all available separately.

Construction	Fully welded aluminium open grid reflector screen, folded dipole, mount pole and low PIM coaxial internals.
Frequency range	410-510 MHz - UHF, TETRA and LMR compatible
Bandwidth	Full frequency range stated - 100MHz
VSWR	<1.5:1 across full bandwidth - 100MHz
Tuning	Factory
Gain	10 dBd
Maximum power	500 Watts
Impedance - nominal	50 Ohms
DC Grounding	Yes
Polarisation	Mount horizontal or vertical as required
H Plane	51°
E Plane	62°
Front-to-back ratio	27 dB
Connector	4.3-10 female
Reflector grid dimensions	Height: 750mm Width: 750mm - edge to edge Depth: 505mm
Weight	4.0kg
Projected area	0.261
Wind load at 160kph	0.309kN ; 31.574kg
Mounting hardware order separate	2 x UAM180L
Mounting position recommended	Mount as high on your mast, tower or structure as possible using the supplied mounting hardware. Ensure no obstructions in face of rear screen.



RA4-R 90° (degree) fully welded rear screen

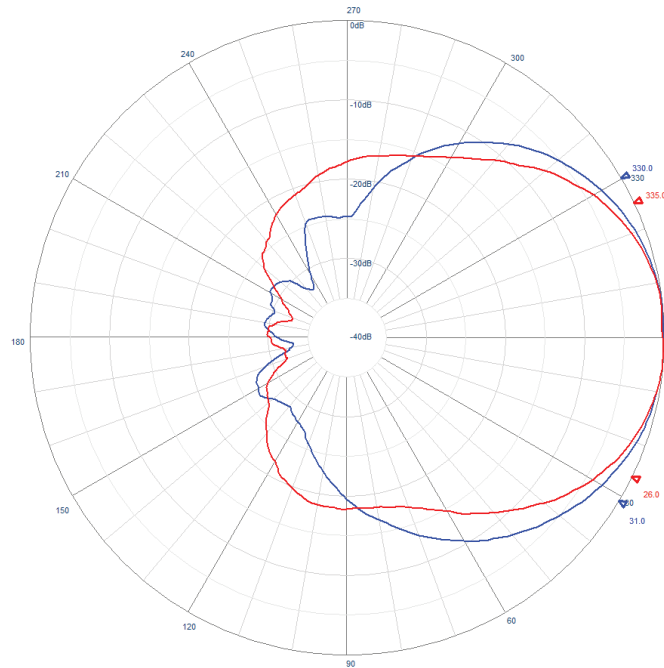


RA4-R 4.3-10 female connector in rear of dipole



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Example radiation pattern - RA4-R



Typical Return Loss Across 400-520 MHz



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Suitable feeder coaxial cable and connectors



SKU: 7800
MIL-SPEC RG213 stranded
copper conductor coaxial cable

Available in 100m or 300m
rolls or alternatively request a
custom cable assembly

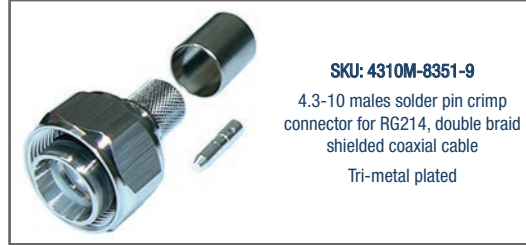


SKU: 4310M-8351
4.3-10 male clamp-style connector
for MIL-SPEC RG213
Tri-metal plated

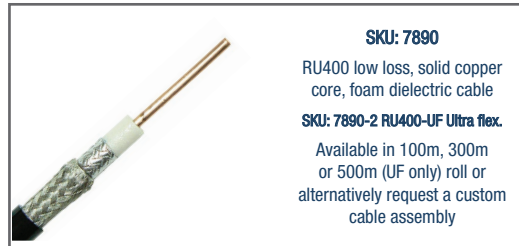


SKU: 7808
RG214/U stranded conductor,
double braided coaxial cable

Available in 100m or 300m
rolls or alternatively request a
custom cable assembly



SKU: 4310M-8351-9
4.3-10 males solder pin crimp
connector for RG214, double braid
shielded coaxial cable
Tri-metal plated

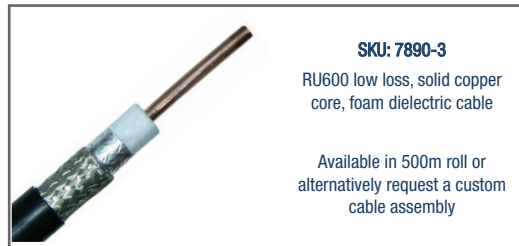


SKU: 7890
RU400 low loss, solid copper
core, foam dielectric cable
SKU: 7890-2 RU400-UF Ultra flex.

Available in 100m, 300m
or 500m (UF only) roll or
alternatively request a custom
cable assembly



SKU: 4310M-8351
4.3-10 male clamp-style connector
for RU400 / RU400-UF coaxial
cable
Tri-metal plated



SKU: 7890-3
RU600 low loss, solid copper
core, foam dielectric cable

Available in 500m roll or
alternatively request a custom
cable assembly



SKU: ZCG1250
1/2" corrugated shielding,
foam dielectric coaxial cable

Air dielectric. SKU: ZCG1250-A
Available in per metre (excl. Air)
or 500m rolls or alternatively
request a custom cable
assembly



SKU: ZCG1250SF
1/2" helical shielded, foam
dielectric coaxial cable

Available in per metre, or 500m
rolls or alternatively request a
custom cable assembly