

# PRODUCT SPECIFICATION

## Radiating Coaxial Cable

### HQ 50S-114

#### PRODUCT DESCRIPTION

- The cable is used as a distributed antenna to provide communications in tunnels, subway mines, large building complexes, and any other application in confined areas.
- Slots in the copper outer conductor allow a controlled portion of the internal RF energy to be radiated into the surrounding environment and can be designed individually.
- With the broadband capability of 75~3000MHz, this cable is used for both one-way and two-way communication systems, and a single radiating cable can handle multiple communication systems simultaneously.



#### CONSTRUCTION

Inner conductor	Smooth copper tube	Φ13.00mm
Insulation	Physically foamed PE	Φ32.80mm
Outer conductor	Corrugated copper tube with single row milled slots	Φ35.80mm
Jacket	Non-halogenated, fire retardant PE	Φ38.80mm

#### MECHANICAL PROPERTIES

Minimum bending radius	mm	200
Tensile force	N	2500

#### ELECTRICAL PROPERTIES

Impedance	Ω	50±2
Capacitance	pF/m	75
Propagation velocity	%	88
DC breakdown voltage	kV	10
Insulation resistance	MΩ•km	>10000

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#### TRANSMISSION PROPERTIES

Frequency MHz	Nom. attenuation @20 °C, dB/100m	Coupling loss(50%/95%) @20 °C, dB
150	1.30	70 / 80
450	3.00	75 / 85
900	4.00	77 / 86
1800	5.60	77 / 88
2400	6.90	78 / 88

Attenuation & Coupling loss test method : IEC 61196-4.

#### VSWR

Tested in customers' operating band ≤1.3

#### ENVIRONMENTAL PROPERTIES

Recommended storage temperature	°C	-70~+85
Recommended installation temperature	°C	-25~+60
Recommended operating temperature	°C	-40~+85