

Antenna Cables General Description

The type of cable used in the antenna system depends on the cable length required and the acceptable signal loss. A general recommendation is to use RG8 for lengths up to 60 ft, 1/2 in. foam for lengths up to 250 ft. and 7/8 in. foam for lengths over 250 ft.

The antenna cables for the packaged gauges are designated by adding "C" to the package model number e.g. 5054C. These standard cable assemblies are RG8 with BNC male and PL-259 male connectors. For packages with lightning arrestors add "LA" to the designation e.g. 5054C-LA; the cable is divided in two and "N" type male connectors are added to the assembly. For custom RG8 cables designate CRG8-connector/connector (e.g. CRG8-BNC/NF). Standard connectors available are BNC(male), PL(-259male), NM(male) and NF(female). For cable lengths over twenty feet order additional cable per foot as CRG8-A.

Foam cable is supplied in bulk and ordered by the foot as e.g. C1/2F. Foam cable installation does not lend itself to preassembly of the connector set which are ordered separately with a designation e.g. C1/2-CS. The cable is very stiff which requires that the excess cable be trimmed at the time of installation. Another consequence of the stiffness is resolved by adding a RG8 pigtail cable (CRG8-NM/NF) for a smooth transition to the radio package.

At sites with tower mounted antenna systems the radio should be installed as close to the antenna as practical to minimize cable length and signal loss.

Specifications

	CRG8-A
Cable Type	RG8
Nominal Impedance	50 ohms
Minimum Bending Radius	1 in.
Weight/100 ft.	10 lbs.
Diameter Over Jacket	0.405 in.
dB loss/100 ft. @ 170 MHz	2.6
dB loss/100 ft. @ 420 MHz	4.4

Ordering Information

Model	Description	Cable Length
CRG8-xx/xx	Standard Antenna Cable, RG8	20 ft.
CRG8-A	Additional Antenna Cable, RG8, per ft.	Under 60 ft.
CRG8/3-xx/xx	Pigtail Cable RG8	3 ft.
Specify Connectors (xx/xx):		
BNC	BNC Male	
PL	PL-259 Male	
NM	"N" Type Male	
FM	"N" Type Female	
C1/2F	Antenna Cable, 1/2 in. Foam, per ft.	60 ft. to 250 ft.
C7/8F	Antenna Cable, 7/8 in. Foam, per ft.	Over 250 ft.
C1/2CS	Connector Set (NM/NF)	
C7/8CS	Connector Set (NM/NF)	

MODEL 5050LA Antenna Lightning Protection

General Description

Broadband VHF/UHF Coaxial lightning protection.

Specifications

Surge:	50kA ANSI C62.1 8/20 waveform 500J
Connector:	"N" Type female
Turn-on:	600 VDC ±20%
Turn-on Time:	2.5 ns
VSWR:	< 1.1 to 1 over freq. range
Insertion Loss:	< 0.1 dB over freq. range
Temperature:	-50 °C to 125 °C

Ordering Information

5050LA Antenna Lightning Protection



Model 5050LA Antenna Lightning Protection

C1/2F	C7/8F
1/2 in. Foam	7/8 in. Foam
50 ohms	50 ohms
5 in.	10 in.
161 lbs.	331 lbs.
0.64 in.	1.1 in.
1.25	0.78
2.05	1.30