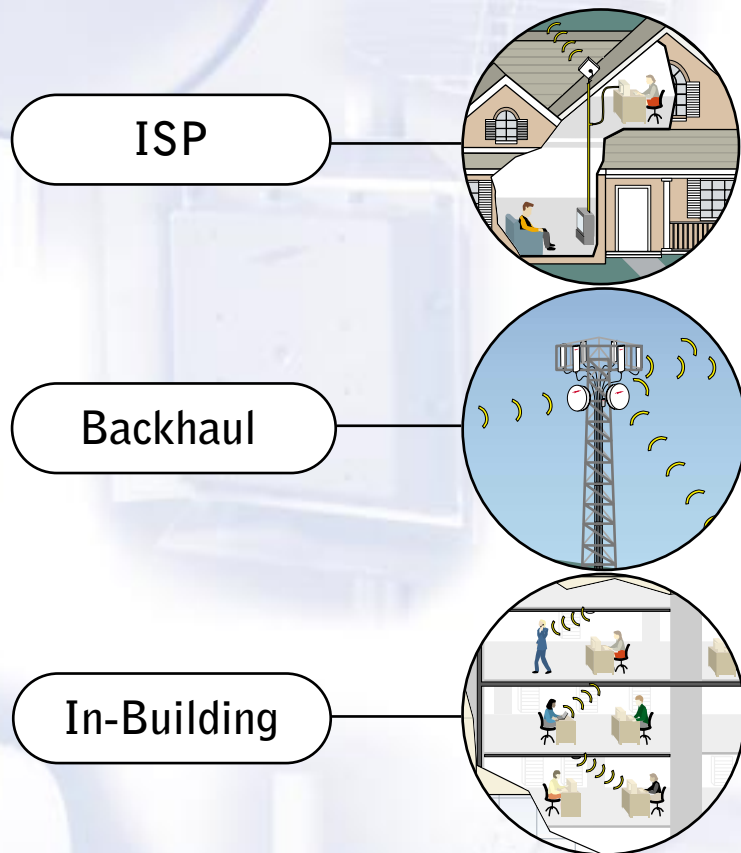


Unlicensed Band

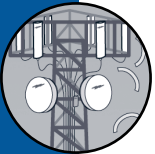
DATA COMMUNICATIONS SOLUTIONS

All the elements from one source providing the speed of data transfer and online performance today's wireless user demands.



Contents

Introduction	2
ISP Antenna Specifications	
2.4 – 2.5 GHz	4
5.7 – 5.875 GHz	5
Backhaul Antenna Specifications	
2.3 – 2.5 GHz	6
5.25 – 5.85 GHz	7
5.725 – 6.425 GHz	8
Dual Band 5.725 – 5.85, 5.925 – 6.445 GHz	8
5.725 – 6.425 GHz	9
5.6 – 6.2 GHz	9
In-Building and Fixed Wireless Products	
2.4 – 2.5 GHz	10
5.725 – 5.875 GHz	10
Transmission Lines	
LDF 4.5-50	12
CNT-195	13
CNT-200	14
CNT-240	15
CNT-300	16
CNT-400	17
CNT-500	18
CNT-600	19
HFC6P	20
HFC11P	21
HFC6	22
HFC11	23
Series 6 Standard Shield 60% Braid	24
Series 6 Tri-Shield 60% Braid	25
Series 6 Standard Shield 90% Braid	26
Series 11 Standard Shield 60% Braid	27
Series 11 Tri-Shield 60% Braid	28
Series 59 Standard Shield 67% Braid	29
Series 59 Tri-Shield 67% Braid	30
Elliptical Waveguide	31
Pressurization Equipment	33



Andrew provides the industry's most comprehensive suite of products and systems that comprise the fastest-delivered, best performing, and most value-priced solutions for unlicensed band data communications applications.

ISP Antennas

Andrew offers a broad line of antennas for ISP systems. They include the MAG GRID, MICROCEPTOR, and PD Series antennas detailed on pages 4 and 5.

MAG GRID antennas include a patented grid reflector that provides excellent reliability plus easy handling and installation. Feeds include an RG8, 24 inch (610 mm) pigtail. The antennas are lightweight and durable. Mounts provide up to 60° tilt adjustment. Materials include magnesium alloy, aluminum, and stainless steel. Antennas ship unassembled for minimum freight costs. Factory assembly is available as an option.

MICROCEPTOR® antennas are designed to provide high performance radiation patterns combined with a small, aesthetically pleasing appearance. The patented feed design provides excellent directivity, cross-polarization performance, and front-to-back ratio. The small size offers low wind load on supporting structures. The mount features 60° tilt adjustment and premise mounts are available. The lightweight and easy to install MICROCEPTOR window mount antennas provide a cost effective solution for high volume deployments in the 2.4-2.7 GHz frequency bands.

PD series parabolic dish antennas include a durable, spun aluminum reflector and offer excellent performance at low cost. Feeds include an RG8, 13 inch (330 mm) long pigtail. Mounts provide up to 60° tilt adjustment. Lightweight, stacked packaging minimizes freight and handling costs.



Backhaul Antennas

Andrew offers a complete line of parabolic backhaul antennas for the unlicensed bands. They include the P, PL, PAR, and PARX Series, KPR and KP Series, HP Series, and UHX® antennas detailed on pages 6 to 9.

P, PL, PAR, and PARX series unshielded parabolic standard antennas provide economical and reliable service. They have spun aluminum reflectors for minimum environmental distortion. A vertical mount is included. A molded radome is optional, as indicated in the tables.

The KPR and KP series GRIDPAK® antennas feature low wind load on the supporting structures. The KPR series incorporate a HELIAX® LDF4-50A cable jumper in the feed design. The KP series has an integral cable connection.

HP series high performance antennas are shielded parabolic antennas with spun aluminum reflectors and low VSWR feeds. The shields offer low side and back lobe radiation performance for easier frequency coordination. A vertical tower mount and a low loss planar radome are included.

UHX® ultra high performance antennas are shielded parabolic antennas. In addition to the features described above for the HP antennas, they include highly efficient, beam-forming feeds and RF absorber in the shields for superior radiation performance.

Flat Plate antennas provide the ultimate solution for operators who require low visibility antennas for unlicensed short haul communications in areas such as congested inner city sites.

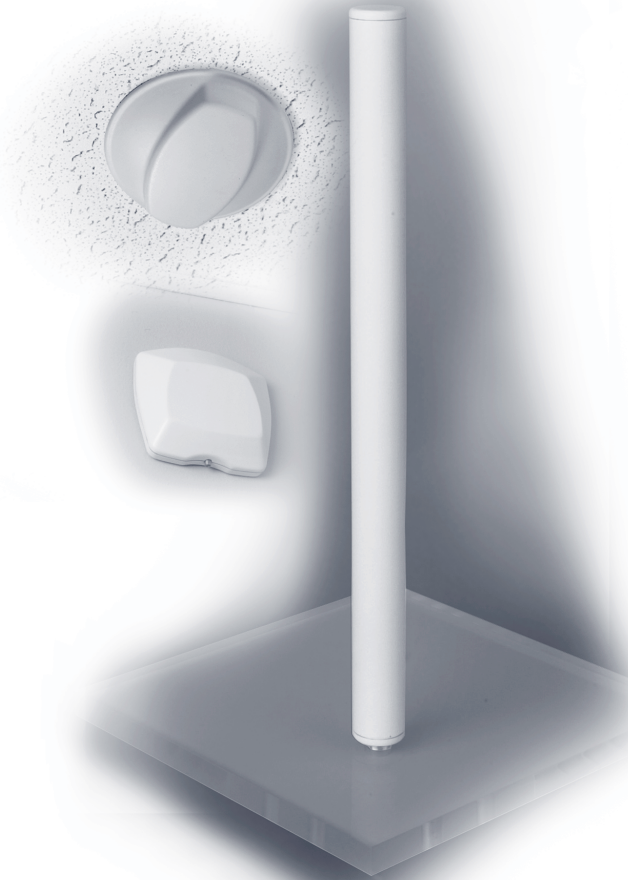


In-Building and Fixed Wireless Products

Our new Cell-Max™ antennas are a uniquely effective and unobtrusive solution for enhancing your internal or external wireless coverage. They include the Cell-Max Directional and Omni-directional antennas detailed on page 10.

Cell-Max directional antennas are ideal for office environments, parking garages, shopping malls and other difficult coverage areas. Designed for simple installation and minimal visual impact, Cell-Max antennas can be mounted upright or inverted for indoor applications. Because the antennas have a broad elevation beamwidth, with no beam tilt, performance is not compromised in either position. Cell-Max directional antennas are suitable for internal or external applications.

Cell-Max omni-directional antennas maintain a pleasing low profile design attractive enough for the more demanding aesthetic requirements of in-building applications and rugged enough for use in external environments. The antennas offer consistent pattern and VSWR performance across the entire frequency band, and the mounting configuration can be customized to interface directly with OEM radio equipment.



ISP Antenna Specifications

Antennas

2.4 – 2.5 GHz

Type Number		Description	Input Type	Gain dB	VSWR (R.L., dB)
MAG GRID Antennas					
18T-2400-1	Single-Pack	Standard Mount	N Male	17	1.6 (13.0)
18T-2400-2	Two-Pack	Standard Mount	N Male	17	1.6 (13.0)
18T-2400-10	Ten-Pack	Standard Mount	N Male	17	1.6 (13.0)
18T-2400F-1	Single-Pack	Standard Mount	N Female	17	1.6 (13.0)
18T-2400F-2	Two-Pack	Standard Mount	N Female	17	1.6 (13.0)
18T-2400F-10	Ten-Pack	Standard Mount	N Female	17	1.6 (13.0)
18T-2400A-1	Single-Pack	Standard Mount	RP-TNC	17	1.6 (13.0)
18T-2400A-2	Two-Pack	Standard Mount	RP-TNC	17	1.6 (13.0)
18T-2400A-10	Ten-Pack	Standard Mount	RP-TNC	17	1.6 (13.0)
26T-2400-1	Single-Pack	Standard Mount	N Male	24	1.6 (13.0)
26T-2400-2	Two-Pack	Standard Mount	N Male	24	1.6 (13.0)
26T-2400-6	Six-Pack	Standard Mount	N Male	24	1.6 (13.0)
26T-2400F-1	Single-Pack	Standard Mount	N Female	24	1.6 (13.0)
26T-2400F-2	Two-Pack	Standard Mount	N Female	24	1.6 (13.0)
26T-2400F-6	Six-Pack	Standard Mount	N Female	24	1.6 (13.0)
26T-2400A-1	Single-Pack	Standard Mount	RP-TNC	24	1.6 (13.0)
26T-2400A-2	Two-Pack	Standard Mount	RP-TNC	24	1.6 (13.0)
26T-2400A-6	Six-Pack	Standard Mount	RP-TNC	24	1.6 (13.0)
26RT-2400-1	Single-Pack	Industrial Mount	N Male	24	1.6 (13.0)
26RT-2400-2	Two-Pack	Industrial Mount	N Male	24	1.6 (13.0)
26RT-2400-6	Six-Pack	Industrial Mount	N Male	24	1.6 (13.0)
26RT-2400F-1	Single-Pack	Industrial Mount	N Female	24	1.6 (13.0)
26RT-2400F-2	Two-Pack	Industrial Mount	N Female	24	1.6 (13.0)
26RT-2400F-6	Six-Pack	Industrial Mount	N Female	24	1.6 (13.0)
26WT-2400-1	Single-Pack	Standard Mount, White Grid	N Male	24	1.6 (13.0)
26WT-2400-2	Two-Pack	Standard Mount, White Grid	N Male	24	1.6 (13.0)
26WT-2400-6	Six-Pack	Standard Mount, White Grid	N Male	24	1.6 (13.0)
26WT-2400F-1	Single-Pack	Standard Mount, White Grid	N Female	24	1.6 (13.0)
26WT-2400F-2	Two-Pack	Standard Mount, White Grid	N Female	24	1.6 (13.0)
26WT-2400F-6	Six-Pack	Standard Mount, White Grid	N Female	24	1.6 (13.0)
MICROCEPTOR® Antennas – Planar Array					
DL-2400-1	Single-Pack	Quick Mount	N Female	13	1.5 (14.0)
DL-2400-10	Ten-Pack	Quick Mount	N Female	13	1.5 (14.0)
DL-2402-1	Single-Pack	Tilt Adjust	N Female	13	1.5 (14.0)
DL-2402-10	Ten-Pack	Tilt Adjust	N Female	13	1.5 (14.0)
DL-2410-1	Single-Pack	Quick Mount, 3 dB Beamwidth	N Female	11	1.5 (14.0)
DL-2410-10	Ten-Pack	Quick Mount, 3 dB Beamwidth	N Female	11	1.5 (14.0)
DL-2412-1	Single-Pack	Tilt Adjust, 3 dB Beamwidth	N Female	11	1.5 (14.0)
DL-2412-10	Ten-Pack	Tilt Adjust, 3 dB Beamwidth	N Female	11	1.5 (14.0)
QD-2327SM10-1	Single-Pack	Window Mount	SMA Male	12.5	1.5 (14.0)
QD-2327SM10-10	Ten-Pack	Window Mount	SMA Male	12.5	1.5 (14.0)
QD-2327NF01-1	Single-Pack	Window Mount	N Female	12.5	1.5 (14.0)
QD-2327NF01-10	Ten-Pack	Window Mount	N Female	12.5	1.5 (14.0)
QD-2327MX10-1	Single-Pack	Window Mount	MCX	12.5	1.5 (14.0)
QD-2327MX10-10	Ten-Pack	Window Mount	MCX	12.5	1.5 (14.0)
QD-2400-1	Single-Pack	Quick Mount	N Female	16	1.5 (14.0)
QD-2400-10	Ten-Pack	Quick Mount	N Female	16	1.5 (14.0)
QD-2402-1	Single-Pack	Tilt Adjust	N Female	16	1.5 (14.0)
QD-2402-10	Ten-Pack	Tilt Adjust	N Female	16	1.5 (14.0)

Type Number		Description	Input Type	Gain dB	VSWR (R.L., dB)
PD Series Antennas - Parabolic Dish					
19T-2440-1	Single-Pack	16 inch Parabolic Dish	N Male	19	1.7 (12.0)
19T-2440-6	Six-Pack	16 inch Parabolic Dish	N Male	19	1.7 (12.0)
19T-2440F-1	Single-Pack	16 inch Parabolic Dish	N Female	19	1.7 (12.0)
19T-2440F-6	Six-Pack	16 inch Parabolic Dish	N Female	19	1.7 (12.0)
21T-2441-1	Single-Pack	24 inch Parabolic Dish	N Male	21	1.7 (12.0)
21T-2441-6	Six-Pack	24 inch Parabolic Dish	N Male	21	1.7 (12.0)
21T-2441F-1	Single-Pack	24 inch Parabolic Dish	N Female	21	1.7 (12.0)
21T-2441F-6	Six-Pack	24 inch Parabolic Dish	N Female	21	1.7 (12.0)
23T-5800-1	Single-Pack	16 inch Parabolic Dish	N Male	23	1.8 (11.0)
23T-5800-6	Six-Pack	16 inch Parabolic Dish	N Male	23	1.8 (11.0)
23T-5800F-1	Single-Pack	16 inch Parabolic Dish	N Female	23	1.8 (11.0)
23T-5800F-6	Six-Pack	16 inch Parabolic Dish	N Female	23	1.8 (11.0)
28T-5801-1	Single-Pack	24 inch Parabolic Dish	N Male	27	1.8 (11.0)
28T-5801-6	Six-Pack	24 inch Parabolic Dish	N Male	27	1.8 (11.0)
28T-5801F-1	Single-Pack	24 inch Parabolic Dish	N Female	27	1.8 (11.0)
28T-5801F-6	Six-Pack	24 inch Parabolic Dish	N Female	27	1.8 (11.0)
Accessories					
GB-3000-1	Single Pack	Grounding Block			
GB-3000-20	Twenty-Pack	Grounding Block			
363030.1		N Male/N Male Adapter, Right Angle			
363043		N Male/N Male Adapter, Straight			
DC-1000		11 dBi & 13 dBi MICROCEPTOR® Cosmetic Cover			
QC-1000		16 dBi MICROCEPTOR Cosmetic Cover			
DS-1000		DBS Style Mount (White)			
DGS-1000		DBS Style Mount (Grey)			
EX-1000		Micro-Mount 10-inch Extension			
UM-1200		Micro-Mount Lower Premise Mount			
APB-BNFnF-2400		Surge Arrestor, 2.0 GHz-2.8 GHz, N Female/N Female			
APB-BNFnF-5800		Surge Arrestor, 5.0 GHz-6.0 GHz, N Female/N Female			

Backhaul Antenna Specifications

Antennas

2.3 – 2.5 GHz

PL, P Standard Antennas – Unpressurized Single Polarized Standard and Low VSWR

Type Number	Diameter ft (m)	Antenna Input	Antenna Color	Radome	Gain, dBi			Beamwidth Degrees	Cross Pol. Disc., dB	F/B Ratio dB	VSWR Max. (R.L., dB)
					Low	Mid-Band	Top				
P2F-23-N7A	2 (0.6)	N Female	Gray	None	20.8	21.6	22.0	12.0*	21	24	1.50 (14.0)
P2F-23-NXA	2 (0.6)	N Female	Gray	Molded	20.8	21.6	22.0	12.0*	21	24	1.50 (14.0)
P2F-23-F7A	2 (0.6)	F Flange, Female	Gray	None	20.8	21.6	22.0	12.0*	21	24	1.50 (14.0)
P2F-23-FXA	2 (0.6)	F Flange, Female	Gray	Molded	20.8	21.6	22.0	12.0*	21	24	1.50 (14.0)
P4F-23-N7A	4 (1.2)	N Female	Gray	None	26.9	27.3	27.6	6.9	32	36	1.20 (20.8)
P4F-23-NXA	4 (1.2)	N Female	Gray	Molded	26.9	27.3	27.6	6.9	32	36	1.20 (20.8)
P4F-23-E7A	4 (1.2)	7/8" EIA	Gray	None	26.9	27.3	27.6	6.9	32	36	1.20 (20.8)
P4F-23-EXA	4 (1.2)	7/8" EIA	Gray	Molded	26.9	27.3	27.6	6.9	32	36	1.20 (20.8)
P4F-23-F7A	4 (1.2)	F Flange, Female	Gray	None	26.9	27.3	27.6	6.9	32	36	1.20 (20.8)
P4F-23-FXA	4 (1.2)	F Flange, Female	Gray	Molded	26.9	27.3	27.6	6.9	32	36	1.20 (20.8)
PL6F-23-N7A	6 (1.8)	N Female	Gray	None	30.4	30.8	31.2	4.7	32	36	1.10 (26.4)
PL6F-23-NXA	6 (1.8)	N Female	Gray	Molded	30.4	30.8	31.2	4.7	32	36	1.10 (26.4)
PL6F-23-E7A	6 (1.8)	7/8" EIA	Gray	None	30.4	30.8	31.2	4.7	32	36	1.10 (26.4)
PL6F-23-EXA	6 (1.8)	7/8" EIA	Gray	Molded	30.4	30.8	31.2	4.7	32	36	1.10 (26.4)
PL6F-23-F7A	6 (1.8)	F Flange, Female	Gray	None	30.4	30.8	31.2	4.7	32	36	1.10 (26.4)
PL6F-23-FXA	6 (1.8)	F Flange, Female	Gray	Molded	30.4	30.8	31.2	4.7	32	36	1.10 (26.4)
PL8F-23-N7A	8 (2.4)	N Female	Gray	None	33.0	33.4	33.8	3.5	30	39	1.08 (28.3)
PL8F-23-NXA	8 (2.4)	N Female	Gray	Molded	33.0	33.4	33.8	3.5	30	39	1.08 (28.3)
PL8F-23-E7A	8 (2.4)	7/8" EIA	Gray	None	33.0	33.4	33.8	3.5	30	39	1.08 (28.3)
PL8F-23-EXA	8 (2.4)	7/8" EIA	Gray	Molded	33.0	33.4	33.8	3.5	30	39	1.08 (28.3)
PL8F-23-F7A	8 (2.4)	F Flange, Female	Gray	None	33.0	33.4	33.8	3.5	30	39	1.08 (28.3)
PL8F-23-FXA	8 (2.4)	F Flange, Female	Gray	Molded	33.0	33.4	33.8	3.5	30	39	1.08 (28.3)
PL10F-23-N7A	10 (3.0)	N Female	Gray	None	34.9	35.3	35.6	3.0	30	44	1.08 (28.3)
PL10F-23-E7A	10 (3.0)	7/8" EIA	Gray	None	34.9	35.3	35.6	3.0	30	44	1.08 (28.3)
PL10F-23-F7A	10 (3.0)	F Flange, Female	Gray	None	34.9	35.3	35.6	3.0	30	44	1.08 (28.3)
PL12F-23-N7M	12 (3.7)	N Female	Gray	None	36.5	36.9	37.2	2.5	32	47	1.08 (28.3)
PL12F-23-E7M	12 (3.7)	7/8" EIA	Gray	None	36.5	36.9	37.2	2.5	32	47	1.08 (28.3)
PL12F-23-F7M	12 (3.7)	F Flange, Female	Gray	None	36.5	36.9	37.2	2.5	32	47	1.08 (28.3)

KPR Rural GRIDPAK® Antennas – F-Series Unpressurized Single Polarized

Type Number	Diameter ft (m)	Antenna Input	Antenna Color	Radome	Gain, dBi			Beamwidth Degrees	Cross Pol. Disc., dB	F/B Ratio dB	VSWR Max. (R.L., dB)
					Low	Mid-Band	Top				
P2F-23-N7A	2 (0.6)	N Female	Gray	None	20.8	21.6	22.0	12.0*	21	24	1.50 (14.0)
KPR3F-23-NWM	2 (0.6)	N Female	Unpainted	None	24.2	23.6	23.6	7.9**	25	24	1.35 (16.5)
KPR3F-23-FWM	2 (0.6)	F Flange, Female	Unpainted	None	24.2	23.6	23.6	7.9**	25	24	1.35 (16.5)
KPR3F-23-EWM	2 (0.6)	7/8" EIA Flange	Unpainted	None	24.2	23.6	23.6	7.9**	25	24	1.35 (16.5)
KPR4F-23-NWM	4 (1.2)	N Female	Unpainted	None	26.9	27.3	27.6	6.2***	28	30	1.35 (16.5)
KPR4F-23-FWM	4 (1.2)	F Flange, Female	Unpainted	None	26.9	27.3	27.6	6.2***	28	30	1.35 (16.5)
KPR4F-23-EWM	4 (1.2)	7/8" EIA Flange	Unpainted	None	26.9	27.3	27.6	6.2***	28	30	1.35 (16.5)
KPR6F-23-NWM	6 (2.0)	N Female	Unpainted	None	30.8	31.3	31.2	4.2	30	35	1.35 (16.5)
KPR6F-23-FWM	6 (2.0)	F Flange, Female	Unpainted	None	30.8	31.3	31.2	4.2	30	35	1.35 (16.5)
KPR6F-23-EWM	6 (2.0)	7/8" EIA Flange	Unpainted	None	30.8	31.3	31.2	4.2	30	35	1.35 (16.5)
KPR8F-23-NWM	8 (2.4)	N Female	Unpainted	None	32.3	32.4	32.7	3.1****	30	36	1.30 (17.7)
KPR8F-23-FWM	8 (2.4)	F Flange, Female	Unpainted	None	32.3	32.4	32.7	3.1****	30	36	1.30 (17.7)
KPR8F-23-EWM	8 (2.4)	7/8" EIA Flange	Unpainted	None	32.3	32.4	32.7	3.1****	30	36	1.30 (17.7)
KPR10F-23-NWM	10 (3.0)	N Female	Unpainted	None	33.5	33.7	34.0	2.9	30	38	1.30 (17.7)
KPR10F-23-FWM	10 (3.0)	F Flange, Female	Unpainted	None	33.5	33.7	34.0	2.9	30	38	1.30 (17.7)
KPR10F-23-EWM	10 (3.0)	7/8" EIA Flange	Unpainted	None	33.5	33.7	34.0	2.9	30	38	1.30 (17.7)
KPR13F-23-NWM	13 (4.0)	N Female	Unpainted	None	36.5	36.8	37.0	2.3	30	40	1.30 (17.7)
KPR13F-23-FWM	13 (4.0)	F Flange, Female	Unpainted	None	36.5	36.8	37.0	2.3	30	40	1.30 (17.7)
KPR13F-23-EWM	13 (4.0)	7/8" EIA Flange	Unpainted	None	36.5	36.8	37.0	2.3	30	40	1.30 (17.7)

KP GRIDPAK® Antennas – F-Series Unpressurized Single Polarized

Type Number	Diameter ft (m)	Antenna Input	Antenna Color	Radome	Low	Gain, dBi Mid-Band	Top	Beamwidth Degrees	Cross Pol. Disc., dB	F/B Ratio dB	VSWR Max. (R.L., dB)
KP3F-23-NWM	3 (0.9)	N Female	Unpainted	None	24.7	25.1	25.3	8.1	38	30	1.20 (20.8)
KP3F-23-FWM	3 (0.9)	F Flange, Female	Unpainted	None	24.7	25.1	25.3	8.1	38	30	1.20 (20.8)
KP3F-23-EWM	3 (0.9)	7/8" EIA Flange	Unpainted	None	24.7	25.1	25.3	8.1	38	30	1.20 (20.8)
KP4F-23-NWM	4 (1.2)	N Female	Unpainted	None	27.2	27.5	27.8	6.9	30	30	1.20 (20.8)
KP4F-23-FWM	4 (1.2)	F Flange, Female	Unpainted	None	27.2	27.5	27.8	6.9	30	30	1.20 (20.8)
KP4F-23-EWM	4 (1.2)	7/8" EIA Flange	Unpainted	None	27.2	27.5	27.8	6.9	30	30	1.20 (20.8)
KP6F-23-NWM	6 (2.0)	N Female	Unpainted	None	31.0	31.3	31.6	4.5	30	36	1.10 (26.4)
KP6F-23-FWM	6 (2.0)	F Flange, Female	Unpainted	None	31.0	31.3	31.6	4.5	30	36	1.10 (26.4)
KP6F-23-EWM	6 (2.0)	7/8" EIA Flange	Unpainted	None	31.0	31.3	31.6	4.5	30	36	1.10 (26.4)
KP8F-23-NWM	8 (2.4)	N Female	Unpainted	None	32.6	32.9	33.1	3.4	30	35	1.08 (28.3)
KP8F-23-FWM	8 (2.4)	F Flange, Female	Unpainted	None	32.6	32.9	33.1	3.4	30	35	1.08 (28.3)
KP8F-23-EWM	8 (2.4)	7/8" EIA Flange	Unpainted	None	32.6	32.9	33.1	3.4	30	35	1.08 (28.3)
KP10F-23-NWM	10 (3.0)	N Female	Unpainted	None	34.5	34.8	35.1	3.0	30	38	1.08 (28.3)
KP10F-23-FWM	10 (3.0)	F Flange, Female	Unpainted	None	34.5	34.8	35.1	3.0	30	38	1.08 (28.3)
KP10F-23-EWM	10 (3.0)	7/8" EIA Flange	Unpainted	None	34.5	34.8	35.1	3.0	30	38	1.08 (28.3)
KP13F-23-NWM	13 (4.0)	N Female	Unpainted	None	37.0	37.2	37.5	2.4	30	38	1.08 (28.3)
KP13F-23-FWM	13 (4.0)	F Flange, Female	Unpainted	None	37.0	37.2	37.5	2.4	30	38	1.08 (28.3)
KP13F-23-EWM	13 (4.0)	7/8" EIA Flange	Unpainted	None	37.0	37.2	37.5	2.4	30	38	1.08 (28.3)

* Horizontal = 13.3 degrees

** Horizontal = 8.7 degrees

*** Horizontal = 6.7 degrees

**** Horizontal = 3.4 degrees

5.25 – 5.85 GHz

Type Number	Diameter ft (m)	Polarization	Antenna Input	Antenna Color	Radome	Low	Gain, dBi Mid-Band	Top	Beamwidth Degrees	Cross Pol. Disc., dB	F/B Ratio dB	VSWR Max. (R.L., dB)
Standard Antennas – Unpressurized												
P2F-52-N7A	2 (0.6)	Single	N Female	Gray	None	29.0	29.4	30.1	5.4	30	41	1.5 (14.0)
P2F-52-NXA	2 (0.6)	Single	N Female	Gray	Molded	29.0	29.4	30.1	5.4	30	41	1.5 (14.0)
PX2F-52-N7A	2 (0.6)	Dual	N Female	Gray	None	29.0	29.4	30.1	5.4	30	41	1.5 (14.0)
PX2F-52-NXA	2 (0.6)	Dual	N Female	Gray	Molded	29.0	29.4	30.1	5.4	30	41	1.5 (14.0)
P3F-52-N7A	3 (1.0)	Single	N Female	Gray	None	33.4	33.4	33.5	3.8	30	42	1.5 (14.0)
P3F-52-NXA	3 (1.0)	Single	N Female	Gray	Molded	33.4	33.4	33.5	3.8	30	42	1.5 (14.0)
PX3F-52-N7A	3 (1.0)	Dual	N Female	Gray	None	33.4	33.4	33.5	3.8	30	42	1.5 (14.0)
PX3F-52-NXA	3 (1.0)	Dual	N Female	Gray	Molded	33.4	33.4	33.5	3.8	30	42	1.5 (14.0)
P4F-52-N7A	4 (1.2)	Single	N Female	Gray	None	34.5	34.9	35.3	3.0	30	52	1.5 (14.0)
P4F-52-NXA	4 (1.2)	Single	N Female	Gray	Molded	34.5	34.9	35.3	3.0	30	52	1.5 (14.0)
PX4F-52-N7A	4 (1.2)	Dual	N Female	Gray	None	34.5	34.9	35.3	3.0	30	52	1.5 (14.0)
PX4F-52-NXA	4 (1.2)	Dual	N Female	Gray	Molded	34.5	34.9	35.3	3.0	30	52	1.5 (14.0)
P6F-52-N7A	6 (1.8)	Single	N Female	Gray	None	37.0	37.6	38.1	1.8	30	49	1.5 (14.0)
P6F-52-NXA	6 (1.8)	Single	N Female	Gray	Molded	37.0	37.6	38.1	1.8	30	49	1.5 (14.0)
PX6F-52-N7A	6 (1.8)	Dual	N Female	Gray	None	37.0	37.6	38.1	1.8	30	49	1.5 (14.0)
PX6F-52-NXA	6 (1.8)	Dual	N Female	Gray	Molded	37.0	37.6	38.1	1.8	30	49	1.5 (14.0)
High Performance Antennas – Unpressurized												
HP2F-52-NPA	2 (0.6)	Single	N Female	Gray	White Molded	28.6	29	29.7	5.4	30	50	1.5 (14.0)
HPX2F-52-NPA	2 (0.6)	Dual	N Female	Gray	White Molded	28.6	29	29.7	5.4	30	50	1.5 (14.0)
HP3F-52-NPA	3 (1.0)	Single	N Female	Gray	White Molded	33	33	33.1	3.8	30	53	1.5 (14.0)
HPX3F-52-NPA	3 (1.0)	Dual	N Female	Gray	White Molded	33	33	33.1	3.8	30	53	1.5 (14.0)
HP4F-52-NPA	4 (1.2)	Single	N Female	Gray	White Molded	34.1	34.5	34.9	3	30	58	1.5 (14.0)
HPX4F-52-NPA	4 (1.2)	Dual	N Female	Gray	White Molded	34.1	34.5	34.9	3	30	58	1.5 (14.0)
HP6F-52-NPA	6 (1.8)	Single	N Female	Gray	White Molded	36.6	37.2	37.7	1.8	30	56	1.5 (14.0)
HPX6F-52-NPA	6 (1.8)	Dual	N Female	Gray	White Molded	36.6	37.2	37.7	1.8	30	56	1.5 (14.0)
Flat Panel Array Antennas – Unpressurized												
FPA5250D06-N	0.5 (0.15)	Single	N Female	Gray	None		18.4		19.3	24	32	1.5 (14.0)
FPA5250D12-N	1 (0.3)	Single	N Female	Gray	None		23.6		9.6	30	38	1.5 (14.0)
FPA5250D24-N	2 (0.6)	Single	N Female	Gray	None		28.5		4.8	30	43	1.5 (14.0)

5.725 – 6.425 GHz

Type Number	Diameter ft (m)	Polarization	Antenna Input	Antenna Color	Radome	Low	Gain, dBi Mid-Band	Top	Beamwidth Degrees	Cross Pol. Disc., dB	F/B Ratio dB	VSWR Max. (R.L., dB)
Standard Antennas – Unpressurized												
P2F-57W-N7A	2 (0.6)	Single	N Female	Gray	None	29.2	29.3	29.9	5.8	30	40	1.1 (26.4)
P2F-57W-NXA	2 (0.6)	Single	N Female	Gray	Molded	29.2	29.3	29.9	5.8	30	40	1.1 (26.4)
P4F-57W-N7A	4 (1.2)	Single	N Female	Gray	None	34.6	35	35.4	2.9	30	40	1.1 (26.4)
P4F-57W-NXA	4 (1.2)	Single	N Female	Gray	Molded	34.6	35	35.4	2.9	30	40	1.1 (26.4)
P6F-57W-N7A	6 (1.8)	Single	N Female	Gray	None	38.0	38.5	39.0	2.0	30	45	1.06 (30.7)
P6F-57W-NXA	6 (1.8)	Single	N Female	Gray	Molded	38.0	38.5	39.0	2.0	30	45	1.06 (30.7)
P8F-57W-N7A	8 (2.4)	Single	N Female	Gray	None	40.7	41.2	41.7	1.6	30	47	1.06 (30.7)
P8F-57W-NXA	8 (2.4)	Single	N Female	Gray	Molded	40.7	41.2	41.7	1.6	30	47	1.06 (30.7)
P10F-57W-N7A	10 (3.0)	Single	N Female	Gray	None	42.5	42.9	43.4	1.3	30	50	1.06 (30.7)
P10F-57W-N7M*	10 (3.0)	Single	N Female	Gray	None	42.5	42.9	43.4	1.3	30	50	1.06 (30.7)
P12F-57W-N7M*	12 (3.7)	Single	N Female	Gray	None	44.2	44.6	45.0	1.0	30	51	1.06 (30.7)
P15F-57W-N7M*	15 (4.6)	Single	N Female	Gray	None	46.0	46.5	47.0	0.8	30	57	1.06 (30.7)
Standard Antennas – Feeds are pressurizable to 10 lb/in² (20 kPa)												
P2-57W-P7A	2 (0.6)	Single	CPR137G	Gray	None	29.2	29.3	29.9	5.8	30	40	1.1 (26.4)
P2-57W-PXA	2 (0.6)	Single	CPR137G	Gray	Molded	29.2	29.3	29.9	5.8	30	40	1.1 (26.4)
P4-57W-P7A	4 (1.2)	Single	CPR137G	Gray	None	34.6	35.0	35.4	2.9	30	40	1.1 (26.4)
P4-57W-PXA	4 (1.2)	Single	CPR137G	Gray	Molded	34.6	35.0	35.4	2.9	30	40	1.1 (26.4)
PL6-57W-P7A	6 (1.8)	Single	CPR137G	Gray	None	38.0	38.5	39.0	2.0	30	45	1.06 (30.7)
PL6-57W-PXA	6 (1.8)	Single	CPR137G	Gray	Molded	38.0	38.5	39.0	2.0	30	45	1.06 (30.7)
PL8-57W-P7A	8 (2.4)	Single	CPR137G	Gray	None	40.7	41.2	41.7	1.6	30	47	1.06 (30.7)
PL8-57W-PXA	8 (2.4)	Single	CPR137G	Gray	Molded	40.7	41.2	41.7	1.6	30	47	1.06 (30.7)
PL10-57W-P7A	10 (3.0)	Single	CPR137G	Gray	None	42.5	42.9	43.4	1.3	30	50	1.06 (30.7)
PL10-57W-P7M*	10 (3.0)	Single	CPR137G	Gray	None	42.5	42.9	43.4	1.3	30	50	1.06 (30.7)
PL12-57W-P7M*	12 (3.7)	Single	CPR137G	Gray	None	44.2	44.6	45.0	1.0	30	51	1.06 (30.7)
PL15-57W-P7M*	15 (4.6)	Single	CPR137G	Gray	None	46.0	46.5	47.0	0.8	30	57	1.06 (30.7)

Dual Band (5.725 – 5.85 and 5.925 – 6.445 GHz)

Type Number	Diameter ft (m)	Polarization	Antenna Input	Antenna Color	Radome	Low	Gain, dBi Mid-Band	Top	Beamwidth Degrees	Cross Pol. Disc., dB	F/B Ratio dB	VSWR Max. (R.L., dB)
Standard Performance, FCC Category A – Feeds are pressurizable to 10 lb/in² (20 kPa)												
PAR6-59-P7A	6 (1.8)	Single	CPR137G	Gray	None	37.7	37.8	37.9	2.0	30	55	1.25 (19.0)
						38.0	38.2	38.4	1.9	30	55	1.06 (30.7)
PAR6-59-PXA	6 (1.8)	Single	CPR137G	Gray	Molded	37.7	37.8	37.9	2.0	30	55	1.25 (19.0)
						38.0	38.2	38.4	1.9	30	55	1.06 (30.7)
PARX6-59-P7A	6 (1.8)	Dual	CPR137G	Gray	None	37.5	37.6	37.7	2.0	30	58	1.25 (19.0)
						37.8	37.9	38.2	1.9	30	60	1.08 (28.3)
PARX6-59-PXA	6 (1.8)	Dual	CPR137G	Gray	Molded	37.5	37.6	37.7	2.0	30	58	1.25 (19.0)
						37.8	37.9	38.2	1.9	30	60	1.08 (28.3)
PAR8-59-P7A	8 (2.4)	Single	CPR137G	Gray	None	40.1	40.2	40.3	1.5	30	55	1.25 (19.0)
						40.4	40.8	41.0	1.4	30	58	1.06 (30.7)
PAR8-59-PXA	8 (2.4)	Single	CPR137G	Gray	Molded	40.1	40.2	40.3	1.5	30	55	1.25 (19.0)
						40.4	40.8	41.0	1.4	30	58	1.06 (30.7)
PARX8-59-P7A	8 (2.4)	Dual	CPR137G	Gray	None	40.1	40.2	40.3	1.5	30	59	1.25 (19.0)
						40.4	40.7	40.9	1.4	30	60	1.08 (28.3)
PARX8-59-PXA	8 (2.4)	Dual	CPR137G	Gray	Molded	40.1	40.2	40.3	1.5	30	59	1.25 (19.0)
						40.4	40.7	40.9	1.4	30	60	1.08 (28.3)

5.725 – 6.425 GHz

Type Number	Diameter ft (m)	Polarization	Antenna Input	Antenna Color	Radome	Gain, <i>dBi</i>			Beamwidth <i>Degrees</i>	Cross Pol. Disc., <i>dB</i>	F/B Ratio <i>dB</i>	VSWR max. (<i>R.L.</i> , <i>dB</i>)
						Low	Mid-Band	Top				
High Performance Antennas – Feeds are unpressurized												
HP4F-57W-P3A	4 (1.2)	Single	N Female	Gray	White Hypalon	34.6	35.0	35.4	2.9	30	59	1.1 (26.4)
HP6F-57W-P1A	6 (1.8)	Single	N Female	Gray	White Hypalon	38.0	38.5	39.0	2.0	30	60	1.06 (30.7)
HP8F-57W-P1A	8 (2.4)	Single	N Female	Gray	White Hypalon	40.7	41.2	41.7	1.6	30	64	1.06 (30.7)
HP10F-57W-P1A	10 (3.0)	Single	N Female	Gray	White Hypalon	42.5	42.9	43.4	1.3	30	65	1.06 (30.7)
HP10F-57W-P1M*	10 (3.0)	Single	N Female	Gray	White Hypalon	42.5	42.9	43.4	1.3	30	65	1.06 (30.7)
HP12F-57W-P1M*	12 (3.7)	Single	N Female	Gray	White Hypalon	44.2	44.6	45.0	1.0	30	70	1.06 (30.7)
HP15F-57W-P1M*	15 (4.6)	Single	N Female	Gray	White Hypalon	46.0	46.5	47.0	0.8	30	70	1.06 (30.7)
High Performance Antennas – Feeds are pressurizable to 10 lb/in² (20 kPa)												
HP4-57W-P3A	4 (1.2)	Single	CPR137G	Gray	White Hypalon	34.6	35.0	35.4	2.9	30	59	1.1 (26.4)
HP6-57W-P1A	6 (1.8)	Single	CPR137G	Gray	White Hypalon	38.0	38.5	39.0	2.0	30	60	1.06 (30.7)
HP8-57W-P1A	8 (2.4)	Single	CPR137G	Gray	White Hypalon	40.7	41.2	41.7	1.6	30	64	1.06 (30.7)
HP10-57W-P1A	10 (3.0)	Single	CPR137G	Gray	White Hypalon	42.5	42.9	43.4	1.3	30	65	1.06 (30.7)
HP10-57W-P1M*	10 (3.0)	Single	CPR137G	Gray	White Hypalon	42.5	42.9	43.4	1.3	30	65	1.06 (30.7)
HP12-57W-P1M*	12 (3.7)	Single	CPR137G	Gray	White Hypalon	44.2	44.6	45.0	1.0	30	70	1.06 (30.7)
HP15-57W-P1M*	15 (4.6)	Single	CPR137G	Gray	White Hypalon	46.0	46.5	47.0	0.8	30	70	1.06 (30.7)

5.6 – 6.2 GHz

Type Number	Diameter <i>ft (m)</i>	Polarization	Antenna Input	Antenna Color	Radome	Gain, <i>dBi</i>			Beamwidth <i>Degrees</i>	Cross Pol. <i>Disc., dB</i>	F/B Ratio <i>dB</i>	VSWR max. <i>(R.L., dB)</i>
						Low	Mid-Band	Top				
High Performance Dual Polarized Antennas – Feeds are pressurizable to 10 lb/in ² (20 kPa)												
HPX8-56-P1A	8 (2.4)	Dual	CPR137G	Gray	White Hypalon	40.5	41.0	41.4	1.6	30	68	1.06 (30.7)
HPX10-56-P1A	10 (3.0)	Dual	CPR137G	Gray	White Hypalon	42.0	42.5	42.9	1.4	30	69	1.06 (30.7)
HPX10-56-P1M*	10 (3.0)	Dual	CPR137G	Gray	White Hypalon	42.0	42.5	42.9	1.4	30	69	1.06 (30.7)
HPX12-56-P1M*	12 (3.7)	Dual	CPR137G	Gray	White Hypalon	43.8	44.2	44.7	1.0	30	71	1.06 (30.7)
Ultra High Performance Antennas – Feeds are pressurizable to 10 lb/in ² (20 kPa)												
UHX10-56-P3A	10 (3.0)	Dual	CPR137G	Gray	White TEGLAR®	42.0	42.5	43.3	1.1	36	72	1.06 (30.7)
UHX10-56-P3M*	10 (3.0)	Dual	CPR137G	Gray	White TEGLAR	42.0	42.5	43.3	1.1	36	72	1.06 (30.7)
UHX12-56-P3M*	12 (3.7)	Dual	CPR137G	Gray	White TEGLAR	44.0	44.5	44.9	0.9	36	73	1.06 (30.7)

* M = split reflector

2.4 – 2.5 GHz

Type Number	Antenna Input	Gain, dBi	Beamwidth, Azimuth Degrees
AVM Series Directional Antennas, Single Element Patch			
AVM2400-0857-00SF	SMA Female	7.5	85
AVM2400-0857-01NF	N Female, 1 ft pigtail	7.5	85
Omni-directional Antennas			
AWA2500-3602-00NF	N Female	2.0	
AWA2500-3605-00NF	N Female	5.0	
AWA2500-3608-00NF	N Female	8.0	

5.725 – 5.875 GHz

Type Number	Antenna Input	Gain, dBi
Omni-directional Antennas		
AWA5800-3602-00NF	N Female	2.0
AWA5800-3605-00NF	N Female	5.0
AWA5800-3608-00NF	N Female	8.0

Transmission Lines

Andrew is the world leader in the design, manufacture, and distribution of transmission line products and subsystems, offering a complete range of high performance, flexible solutions for the unlicensed bands.

Type LDF4.5–50 HELIAX® foam dielectric cable

Andrew offers a full line of HELIAX coaxial cables presented in detail in our general Catalog (available online at www.andrew.com). Type LDF4.5-50 is typically the choice for unlicensed band applications.

Flexibility

HELIAX foam dielectric cables feature an annularly corrugated outer conductor that provides excellent shielding while offering flexibility.

Complete Product Range

LDF cables are available in sizes from 1/4" to 2-1/4".

Weatherproof

Closed cell dielectric prevents water penetration.
Connector O-rings seal out moisture.

Excellent Intermodulation Performance

Solid inner and outer conductors eliminate IM generated by numerous moving contacts in the current path.

Quick and Easy Connector Attachment

A range of self flaring connectors are available for easy field attachment requiring no special tools.

Cinta™ braided cables

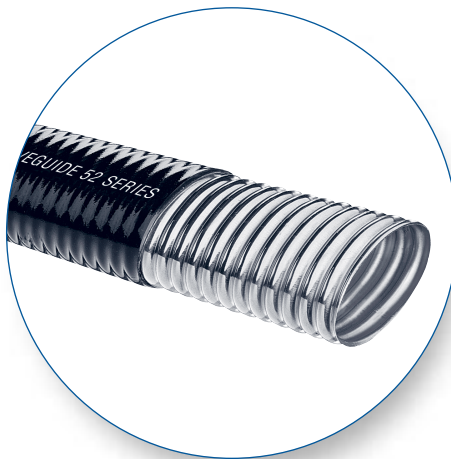
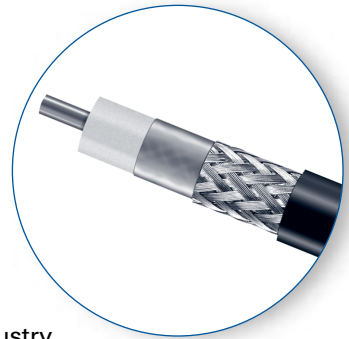
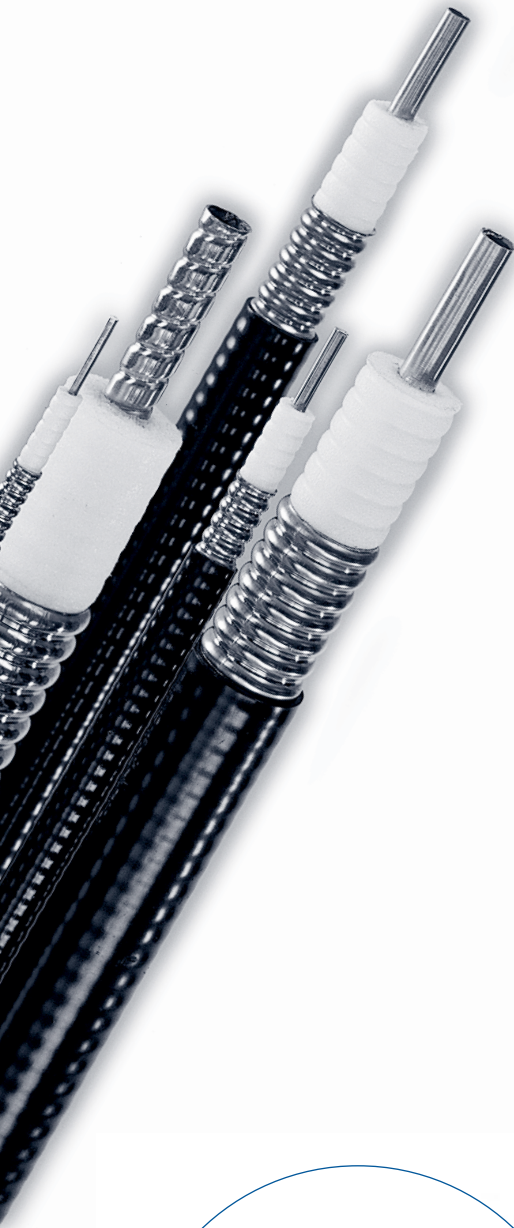
New Cinta braided cables are constructed with the highest quality copper, aluminum, and polyethylene materials. The cables are manufactured using the highest technology processes, resulting in a coaxial cable with superior electrical, mechanical, and environmental resistance performance.

Cinta braided cables are compatible with industry standard connectors, tools, and all other needed accessories. Using all Andrew products for all your wireless and wired braided cable applications helps to ensure overall system performance reliability.

Cinta cables are available in seven sizes with over jacket diameters ranging from CNT-195 (0.195 inches or 4.95 mm) to CNT-600 (0.590 inches or 14.99 mm).

HELIAX elliptical waveguide Type EWP52

HELIAX elliptical waveguide offers lowest attenuation for the 5.0–6.425 GHz unlicensed band. The corrugated copper walls give HELIAX elliptical waveguide excellent crush strength and good flexibility. A rugged black polyethylene jacket provides protection during handling and installation. Assemblies consist of waveguide cut to length and fitted with connectors. Alternatively, bulk lengths may be ordered and individual feeders cut to length on site.



Cable Description

5/8" Standard Cable, Standard Jacket

Type Number

LDF4.5-50

Specifications**Mechanical**

Minimum Bending Radius, <i>in (mm)</i>	8 (200)
Number of Bends, <i>minimum (typical)</i>	15 (40)
Bending Moment, <i>lb-ft (N•m)</i>	2.8 (3.8)
Cable Weight, <i>lb/ft (kg/m)</i>	0.27 (0.402)
Tensile Strength, <i>lb (kg)</i>	800 (363)
Flat Plate Crush Strength, <i>lb/in (kg/mm)</i>	70 (1.3)

Construction Materials

Inner Conductor	Copper-Clad Aluminum
Outer Conductor	Copper

Dimensions

Diameter Inner Conductor, <i>in (mm)</i>	0.277 (7.04)
Diameter over Jacket, <i>in (mm)</i>	0.865 (21.97)
Diameter over Copper Outer Conductor, <i>in (mm)</i>	0.777 (19.74)

Electrical

Impedance, <i>ohms</i>	50 ± 1
Maximum Frequency, <i>GHz</i>	6.1
Velocity, <i>percent</i>	89
Peak Power Rating, <i>kW</i>	62
dc Resistance, <i>ohms/1000 ft (1000 m)</i>	
Inner Conductor	0.15 (0.49)
Outer Conductor	0.42 (1.37)
dc Breakdown, <i>volts</i>	5000
Jacket Spark, <i>volts RMS</i>	8000
Capacitance, <i>pF/ft (m)</i>	23.2 (76.1)
Inductance, <i>μH/ft (m)</i>	0.057 (0.187)

Attenuation and Average Power Ratings

Frequency <i>MHz</i>	Attenuation <i>dB/100 ft</i>	Attenuation <i>dB/100 m</i>	Average Power, <i>kW</i>
2300	2.65	8.70	0.92
2400	2.72	8.93	0.90
2500	2.79	9.14	0.88
2600	2.85	9.36	0.86
2700	2.92	9.57	0.84
2800	2.98	9.78	0.82
2900	3.05	9.99	0.80
3000	3.11	10.20	0.79
3100	3.17	10.40	0.77
3200	3.23	10.60	0.76
3300	3.29	10.80	0.74
3400	3.35	11.00	0.73
3500	3.41	11.19	0.72
3600	3.47	11.39	0.71
3700	3.53	11.58	0.69
3800	3.59	11.77	0.68
3900	3.64	11.96	0.67
4000	3.70	12.14	0.66
4100	3.76	12.33	0.65
4200	3.81	12.51	0.64
4300	3.87	12.70	0.63
4400	3.93	12.88	0.62
4500	3.98	13.06	0.62
4600	4.03	13.24	0.61
4700	4.09	13.41	0.60
4800	4.14	13.59	0.59
4900	4.20	13.77	0.58
5000	4.25	13.94	0.58
5100	4.30	14.11	0.57
5200	4.35	14.29	0.56
5300	4.41	14.46	0.56
5400	4.46	14.63	0.55
5500	4.51	14.80	0.54
5600	4.56	14.97	0.54
5700	4.61	15.13	0.53
5800	4.66	15.30	0.53
5900	4.71	15.47	0.52
6000	4.76	15.63	0.51
6100	4.81	15.80	0.51

Standard Conditions: For Attenuation. VSWR 1.0, ambient temperature 20°C (68°F).
For Average Power. VSWR 1.0, ambient temperature 40°C (104°F), inner conductor
temperature 100°C (212°F); no solar loading.

Accessories

Description	Type Number	Description	Type Number
Standard Hangers Kit of 10.		SureGround™ Grounding Kit with standard weatherproofing	
Recommended maximum spacing is 3-ft (1 m).	42396A-9	Factory attached two-hole lug,	
Snap-In Hangers Kit of 10. For prepunched 3/4" (19 mm) holes on tower member or adapters.		24" (600 mm) lead	SGL45-06B2
Recommended maximum spacing is 3-ft (1 m).	206706A-6	Field attached two-hole lug,	
Click-On Hangers Kit of 10.		59" (1500 mm) lead	SGL45-15B4
Recommended maximum spacing is 3-ft (1 m).	L45CLICK	Standard Cable Entry Boots, 4" boots.	
Standard Hoisting Grip. Use at 200 ft (60 m) intervals.	29958	One 5/8" openings	204679A-13
		Three 5/8" openings	204679A-14

Connectors

Interface	Description	Type Number	Inner Contact Attachment	Outer Contact Attachment	Plating Code	Max. Length <i>in (mm)</i>	Max. Dia. <i>in (mm)</i>
N Male	Ring Flare	L4.5PNM-RC	Captivated	Self Flare	SG	3.2 (81.5)	1.42 (36.0)
N Female	Ring Flare	L4.5PNF-RC	Captivated	Self Flare	SG	3.0 (76.0)	1.32 (33.5)
7-16 DIN Male	Ring Flare	L4.5PDM-RC	Captivated	Self Flare	SS	3.1 (78.0)	1.17 (29.8)
7-16 DIN Female	Ring Flare	L4.5PDF-RC	Captivated	Self Flare	SS	3.25 (82.0)	1.17 (29.8)

Plating Codes: SG - Silver Plated Body and Gold Plated Pin, SS - Silver Plated Body and Pin*Finish Metals: T = Tri-Metal Alloy, G = Gold

Cable Description

Standard Outdoor Cable, Polyethylene Jacket
 Watertight Cable, Polyethylene Jacket
 Fire Retardant Cable (CATVR), Non-Halogenated Jacket

Type Number

CNT-195
 CNT-195-DB
 CNT-195-FR

Specifications**Mechanical**

Minimum Bending Radius, <i>in (mm)</i>	0.5 (12.7)
Bending Moment, <i>lb-ft (N•m)</i>	0.2 (0.27)
Cable Weight, <i>lb/ft (kg/m)</i>	0.021 (0.03)
Tensile Strength, <i>lb (kg)</i>	40 (18.2)
Flat Plate Crush Strength, <i>lb/in (kg/mm)</i>	15 (0.27)

Construction Materials

Inner Conductor	Solid BC
Dielectric	Foam Polyethylene
Outer Conductor	Aluminum Tape
Overall Braid	Tinned Copper

Dimensions

Diameter Inner Conductor, <i>in (mm)</i>	0.037 (0.94)
Diameter Dielectric, <i>in (mm)</i>	0.113 (2.87)
Diameter Outer Conductor, <i>in (mm)</i>	0.118 (3.00)
Diameter Overall Braid, <i>in (mm)</i>	0.141 (3.58)
Diameter over Jacket, <i>in (mm)</i>	0.195 (4.95)

Environmental

Storage Temperature, °C (°F)	-70 to +85 (-94 to +185)
Installation Temperature, °C (°F)	-40 to +85 (-40 to +185)
Operating Temperature, °C (°F)	-40 to +85 (-40 to +185)

Electrical

Impedance, <i>ohms</i>	50 ± 2
Maximum Frequency, <i>GHz</i>	41
Velocity, <i>percent</i>	80
dc Breakdown, <i>volts</i>	1000
Peak Power Rating, <i>kW</i>	2.5
dc Resistance, <i>ohms/1000 ft (1000 m)</i>	
Inner Conductor	7.6 (29.94)
Outer Conductor	4.9 (16.08)
Jacket Spark, <i>volts RMS</i>	3000
Capacitance, <i>pF/ft (m)</i>	24.3 (79.7)
Inductance, <i>μH/ft (m)</i>	0.064 (0.21)

Attenuation and Average Power Ratings

Frequency <i>MHz</i>	Attenuation <i>dB/100 ft</i>	Attenuation <i>dB/100 m</i>	Average Power, <i>kW</i>
2300	17.1	56.4	0.09
2400	17.5	57.7	0.09
2500	17.9	58.9	0.09
5200	26.2	86	0.062
5300	26.5	86.9	0.062
5400	26.7	87.7	0.061
5500	27.0	88.6	0.061
5600	27.3	86.4	0.060
5700	27.5	90.3	0.060
5800	27.8	91.1	0.059
5900	28.0	91.9	0.059
6000	28.3	92.7	0.058

Standard Conditions: For Attenuation: VSWR 1.0, ambient temperature 20°C (68°F).
 For Average Power: VSWR 1.0, ambient temperature 40°C (104°F), inner conductor
 temperature 100°C (212°F), sea level, dry air, atmospheric pressure, no solar loading.

Accessories**Description**

Crimping Tool
 Nylon Cable Ties, Pack of 50
 Standard Weatherproofing Kit

Type Number

CTBC
 CT-CNT
 WK-CNT

Connectors

Interface	Description	Part Number	Coupling Nut	Inner Contact Attachment	Outer Contact Attachment	Finish* Body/Pin
N Male	Straight	195PNM-CR	Hex	Solder	Crimp	T/G
N Male	Straight	195PNM-H	Hex	Solder	Clamp	T/G
N Male	Right Angle	195PNR-CR	Hex	Solder	Crimp	T/G
TNC Male	Straight	195PTM	Hex	Solder	Clamp	T/G
TNC Female	Straight	195PTF	NA	Solder	Clamp	T/G
SMA Male	Straight	195PSM-CR	Hex	Solder	Crimp	SS
SMA Male	Right Angle	195PSR -CR	Hex	Solder	Crimp	SS

*Finish Metals: T = Tri-Metal Alloy, SS = Stainless Steel (Passivated), G = Gold

Cable Description

Standard Outdoor Cable, Polyethylene Jacket
 Watertight Cable, Polyethylene Jacket
 Fire Retardant Cable (CATVR), Non-Halogenated Jacket

Type Number

CNT-200
 CNT-200-DB
 CNT-200-FR

Specifications**Mechanical**

Minimum Bending Radius, <i>in (mm)</i>	0.5 (12.7)
Bending Moment, <i>lb-ft (N•m)</i>	0.2 (0.27)
Cable Weight, <i>lb/ft (kg/m)</i>	0.022 (0.03)
Tensile Strength, <i>lb (kg)</i>	40 (18.2)
Flat Plate Crush Strength, <i>lb/in (kg/mm)</i>	15 (0.27)

Construction Materials

Inner Conductor	Solid BC
Dielectric	Foam Polyethylene
Outer Conductor	Aluminum Tape
Overall Braid	Tinned Copper

Dimensions

Diameter Inner Conductor, <i>in (mm)</i>	0.044 (1.12)
Diameter Dielectric, <i>in (mm)</i>	0.116 (2.95)
Diameter Outer Conductor, <i>in (mm)</i>	0.121 (3.07)
Diameter Overall Braid, <i>in (mm)</i>	0.144 (3.66)
Diameter over Jacket, <i>in (mm)</i>	0.195 (4.95)

Environmental

Storage Temperature, °C (°F)	-70 to +85 (-94 to +185)
Installation Temperature, °C (°F)	-40 to +85 (-40 to +185)
Operating Temperature, °C (°F)	-40 to +85 (-40 to +185)

Electrical

Impedance, <i>ohms</i>	50 ± 2
Maximum Frequency, <i>GHz</i>	39
Velocity, <i>percent</i>	83
dc Breakdown, <i>volts</i>	1000
Peak Power Rating, <i>kW</i>	2.5
dc Resistance, <i>ohms/1000 ft (1000 m)</i>	
Inner Conductor	5.36 (17.59)
Outer Conductor	4.9 (16.08)
Jacket Spark, <i>volts RMS</i>	3000
Capacitance, <i>pF/ft (m)</i>	24.5 (80.4)
Inductance, <i>μH/ft (m)</i>	0.061 (0.20)

Attenuation and Average Power Ratings

Frequency <i>MHz</i>	Attenuation <i>dB/100 ft</i>	Attenuation <i>dB/100 m</i>	Average Power, <i>kW</i>
2300	16.0	52.4	0.110
2400	16.4	53.6	0.110
2500	16.7	54.8	0.110
5200	24.6	80.6	0.075
5300	24.8	81.4	0.074
5400	25.1	82.2	0.073
5500	25.3	83.0	0.073
5600	25.6	83.8	0.072
5700	25.8	84.6	0.072
5800	26.0	85.4	0.071
5900	26.3	86.2	0.070
6000	26.5	87.0	0.070

Standard Conditions: For Attenuation: VSWR 1.0, ambient temperature 20°C (68°F).
 For Average Power: VSWR 1.0, ambient temperature 40°C (104°F), inner conductor
 temperature 100°C (212°F), sea level, dry air, atmospheric pressure, no solar loading.

Accessories**Description**

Crimping Tool
 Nylon Cable Ties, Pack of 50
 Standard Weatherproofing Kit

Type Number

CTBC
 CT-CNT
 WK-CNT

Connectors

Interface	Description	Part Number	Coupling Nut	Inner Contact Attachment	Outer Contact Attachment	Finish* Body/Pin
N Male	Straight	200PNM-CR	Hex	Solder	Crimp	T/G
N Male	Straight	200PNM-H	Hex	Solder	Clamp	T/G
N Female	Straight	200 PNF-BH-CR	Hex	Solder	Clamp	T/G
TNC Male	Straight	200PTM	Hex	Solder	Clamp	T/G
TNC Female	Straight	200PTF	NA	Solder	Clamp	T/G
TNC Female	Straight	200 PTF-BH-CR	Hex	Solder	Clamp	T/G
SMA Male	Straight	200PSM-CR	Hex	Solder	Crimp	SS
SMA Male	Right Angle	200PSR-CR	Hex	Solder	Crimp	SS

*Finish Metals: T = Tri-Metal Alloy, SS = Stainless Steel (Passivated), G = Gold

Cable Description

Standard Outdoor Cable, Polyethylene Jacket
 Watertight Cable, Polyethylene Jacket
 Fire Retardant Cable (CATVR), Non-Halogenated Jacket

Type Number

CNT-240
 CNT-240-DB
 CNT-240-FR

Specifications**Mechanical**

Minimum Bending Radius, <i>in (mm)</i>	0.6 (15.3)
Bending Moment, <i>lb-ft (N•m)</i>	0.25 (0.34)
Cable Weight, <i>lb/ft (kg/m)</i>	0.034 (0.05)
Tensile Strength, <i>lb (kg)</i>	80 (36.3)
Flat Plate Crush Strength, <i>lb/in (kg/mm)</i>	20 (0.36)

Construction Materials

Inner Conductor	Solid BC
Dielectric	Foam Polyethylene
Outer Conductor	Aluminum Tape
Overall Braid	Tinned Copper

Dimensions

Diameter Inner Conductor, <i>in (mm)</i>	0.056 (1.42)
Diameter Dielectric, <i>in (mm)</i>	0.150 (3.81)
Diameter Outer Conductor, <i>in (mm)</i>	0.155 (3.94)
Diameter Overall Braid, <i>in (mm)</i>	0.178 (4.52)
Diameter over Jacket, <i>in (mm)</i>	0.240 (6.10)

Environmental

Storage Temperature, °C (°F)	-70 to +85 (-94 to +185)
Installation Temperature, °C (°F)	-40 to +85 (-40 to +185)
Operating Temperature, °C (°F)	-40 to +85 (-40 to +185)

Electrical

Impedance, <i>ohms</i>	50 ± 2
Maximum Frequency, <i>GHz</i>	31
Velocity, <i>percent</i>	84
dc Breakdown, <i>volts</i>	1500
Peak Power Rating, <i>kW</i>	5.6
dc Resistance, <i>ohms/1000 ft (1000 m)</i>	
Inner Conductor	3.2 (10.50)
Outer Conductor	3.89 (12.76)
Jacket Spark, <i>volts RMS</i>	5000
Capacitance, <i>pF/ft (m)</i>	24.7 (79.40)
Inductance, <i>μH/ft (m)</i>	0.060 (0.20)

Attenuation and Average Power Ratings

Frequency <i>MHz</i>	Attenuation <i>dB/100 ft</i>	Attenuation <i>dB/100 m</i>	Average Power, <i>kW</i>
2300	12.3	40.2	0.16
2400	12.5	41.1	0.15
2500	12.8	42.0	0.15
5200	18.0	75.1	0.11
5300	19.2	76.0	0.11
5400	19.4	76.8	0.11
5500	19.6	77.7	0.11
5600	19.8	78.6	0.10
5700	19.9	79.5	0.10
5800	20.1	80.3	0.10
5900	20.3	81.2	0.10
6000	20.5	82.1	0.10

Standard Conditions: For Attenuation: VSWR 1.0, ambient temperature 20°C (68°F).
 For Average Power: VSWR 1.0, ambient temperature 40°C (104°F), inner conductor
 temperature 100°C (212°F), sea level, dry air, atmospheric pressure, no solar loading.

Accessories**Description****Type Number**

Crimping Tool
 Nylon Cable Ties, Pack of 50
 Standard Weatherproofing Kit

CTBC-2
 CT-CNT
 WK-CNT

Connectors

Interface	Description	Part Number	Coupling Nut	Inner Contact Attachment	Outer Contact Attachment	Finish* Body/Pin
N Male	Straight	240PNM-H	Hex	Solder	Clamp	T/G
N Female	Straight	240PNF-BH-CR	Hex	Solder	Clamp	T/G
TNC Male	Straight	240PTM	Hex	Solder	Clamp	T/G
TNC Male	Right Angle	240PTR	Hex	Solder	Clamp	T/G
TNC Female	Straight	240PTF-BH-CR	Hex	Solder	Clamp	T/G
N Male	Straight	240PNM-H	Hex	Solder	Clamp	T/G
SMA Male	Straight	240PSM-CR	Hex	Solder	Crimp	SS
SMA Male	Right Angle	240PSR-CR	Hex	Solder	Crimp	SS

*Finish Metals: T = Tri-Metal Alloy, SS = Stainless Steel (Passivated), G = Gold

Cable Description

Standard Outdoor Cable, Polyethylene Jacket
 Watertight Cable, Polyethylene Jacket
 Fire Retardant Cable (CATVR), Non-Halogenated Jacket

Type Number

CNT-300
 CNT-300-DB
 CNT-300-FR

Specifications

Mechanical

Minimum Bending Radius, <i>in (mm)</i>	0.75 (19.1)
Bending Moment, <i>lb-ft (N•m)</i>	0.38 (0.52)
Cable Weight, <i>lb/ft (kg/m)</i>	0.055 (0.08)
Tensile Strength, <i>lb (kg)</i>	120 (54.5)
Flat Plate Crush Strength, <i>lb/in (kg/mm)</i>	30 (0.54)

Construction Materials

Inner Conductor	Solid BC
Dielectric	Foam Polyethylene
Outer Conductor	Aluminum Tape
Overall Braid	Tinned Copper

Dimensions

Diameter Inner Conductor, <i>in (mm)</i>	0.070 (1.78)
Diameter Dielectric, <i>in (mm)</i>	0.190 (4.83)
Diameter Outer Conductor, <i>in (mm)</i>	0.196 (4.98)
Diameter Overall Braid, <i>in (mm)</i>	0.225 (5.72)
Diameter over Jacket, <i>in (mm)</i>	0.300 (7.62)

Environmental

Storage Temperature, °C (°F)	-70 to +85 (-94 to +185)
Installation Temperature, °C (°F)	-40 to +85 (-40 to +185)
Operating Temperature, °C (°F)	-40 to +85 (-40 to +185)

Electrical

Impedance, <i>ohms</i>	50 ± 2
Maximum Frequency, <i>GHz</i>	24.5
Velocity, <i>percent</i>	85
dc Breakdown, <i>volts</i>	2000
Peak Power Rating, <i>kW</i>	10
dc Resistance, <i>ohms/1000 ft (1000 m)</i>	
Inner Conductor	2.12 (6.96)
Outer Conductor	2.21 (7.25)
Jacket Spark, <i>volts RMS</i>	5000
Capacitance, <i>pF/ft (m)</i>	24.1 (79.10)
Inductance, <i>μH/ft (m)</i>	0.060 (0.20)

Attenuation and Average Power Ratings

Frequency <i>MHz</i>	Attenuation <i>dB/100 ft</i>	Attenuation <i>dB/100 m</i>	Average Power, <i>kW</i>
2300	9.8	32.4	0.22
2400	10.0	33.1	0.22
2500	10.3	33.9	0.21
5200	15.2	49.9	0.15
5300	15.4	50.4	0.15
5400	15.5	50.9	0.15
5500	15.7	51.4	0.15
5600	15.8	51.9	0.14
5700	16.0	52.4	0.14
5800	16.1	52.9	0.14
5900	16.3	53.4	0.14
6000	16.4	53.9	0.14

Standard Conditions: For Attenuation: VSWR 1.0, ambient temperature 20°C (68°F).
 For Average Power: VSWR 1.0, ambient temperature 40°C (104°F), inner conductor
 temperature 100°C (212°F), sea level, dry air, atmospheric pressure, no solar loading.

Accessories

Description

Crimping Tool
 Nylon Cable Ties, Pack of 50
 Standard Weatherproofing Kit

Type Number

CTBC-2
 CT-CNT
 WK-CNT

Connectors

Interface	Description	Part Number	Coupling Nut	Inner Contact Attachment	Outer Contact Attachment	Finish* Body/Pin
N Male	Straight	300PNM-H	Hex	Solder	Clamp	T/G
N Male	Right Angle	300PNR-H	Hex	Solder	Clamp	T/G
TNC Male	Straight	300PTM	Hex	Solder	Clamp	T/G
TNC Male	Right Angle	300PTR-CR	Hex	Solder	Crimp	T/G
SMA Male	Straight	300PSM-CR	Hex	Solder	Clamp	T/G
SMA Male	Right Angle	300PSR-CR	Hex	Solder	Crimp	T/G

*Finish Metals: T = Tri-Metal Alloy, G = Gold

Cable Description

Standard Outdoor Cable, Polyethylene Jacket
 Watertight Cable, Polyethylene Jacket
 Fire Retardant Cable (CATVR), Non-Halogenated Jacket

Type Number

CNT-400
 CNT-400-DB
 CNT-400-FR

Specifications**Mechanical**

Minimum Bending Radius, <i>in (mm)</i>	1.0 (25.4)
Bending Moment, <i>lb-ft (N•m)</i>	0.5 (0.68)
Cable Weight, <i>lb/ft (kg/m)</i>	0.068 (0.10)
Tensile Strength, <i>lb (kg)</i>	160 (72.6)
Flat Plate Crush Strength, <i>lb/in (kg/mm)</i>	40 (0.71)

Construction Materials

Inner Conductor	Solid BC
Dielectric	Foam Polyethylene
Outer Conductor	Aluminum Tape
Overall Braid	Tinned Copper

Dimensions

Diameter Inner Conductor, <i>in (mm)</i>	0.108 (2.74)
Diameter Dielectric, <i>in (mm)</i>	0.285 (7.24)
Diameter Outer Conductor, <i>in (mm)</i>	0.291 (7.39)
Diameter Overall Braid, <i>in (mm)</i>	0.320 (8.13)
Diameter over Jacket, <i>in (mm)</i>	0.405 (10.29)

Environmental

Storage Temperature, °C (°F)	-70 to +85 (-94 to +185)
Installation Temperature, °C (°F)	-40 to +85 (-40 to +185)
Operating Temperature, °C (°F)	-40 to +85 (-40 to +185)

Electrical

Impedance, <i>ohms</i>	50 ± 2
Maximum Frequency, <i>GHz</i>	16.2
Velocity, <i>percent</i>	85
dc Breakdown, <i>volts</i>	2500
Peak Power Rating, <i>kW</i>	16
dc Resistance, <i>ohms/1000 ft (1000 m)</i>	
Inner Conductor	1.39 (4.56)
Outer Conductor	1.65 (5.41)
Jacket Spark, <i>volts RMS</i>	8000
Capacitance, <i>pF/ft (m)</i>	23.9 (78.40)
Inductance, <i>μH/ft (m)</i>	0.060 (0.20)

Attenuation and Average Power Ratings

Frequency <i>MHz</i>	Attenuation <i>dB/100 ft</i>	Attenuation <i>dB/100 m</i>	Average Power, <i>kW</i>
2300	6.4	21.0	0.35
2400	6.5	21.5	0.34
2500	6.7	22.0	0.33
5200	9.9	32.6	0.24
5300	10.0	33.0	0.24
5400	10.2	33.3	0.24
5500	10.3	33.6	0.23
5600	10.4	34.0	0.23
5700	10.5	34.3	0.23
5800	10.6	34.7	0.23
5900	10.7	35.0	0.23
6000	10.8	35.3	0.22

Standard Conditions: For Attenuation: VSWR 1.0, ambient temperature 20°C (68°F).
 For Average Power: VSWR 1.0, ambient temperature 40°C (104°F), inner conductor temperature 100°C (212°F), sea level, dry air, atmospheric pressure, no solar loading.

Accessories**Description**

Cable Stripping Tool
 Crimping Tool
 Grounding Kit, 24 in. lead, 2 hole lug

Type Number

BCPT-400
 CTBC
 GK-400

Description

Nylon Cable Ties, Pack of 50
 Standard Weatherproofing Kit
 Standard 4" Cable Entry Boot, 6 hole

Type Number

CT-CNT
 WK-CNT
 CEB-400-6

Connectors

Interface	Description	Part Number	Coupling Nut	Inner Contact Attachment	Outer Contact Attachment	Finish* Body/Pin
N Male	Straight	400PNM-H	Hex	Solder	Clamp	T/G
N Male	Straight	400PNM-H-CR	Hex	Solder	Crimp	T/G
N Male	Straight	400PNM-HC	Hex	Spring Finger	Clamp	T/G
N Male	Straight	400PNM-HC-CR	Hex	Spring Finger	Crimp	T/G
N Male	Right Angle	400PNR-H	Hex	Solder	Clamp	T/G
N Female	Straight	400PNF	NA	Solder	Clamp	T/G
N Female	Straight	400PNF-C-CR	NA	Spring Finger	Crimp	T/G
N Female	Bulkhead	400PNF-BHC	NA	Spring Finger	Clamp	T/G
TNC Male	Straight	400PTM	Hex	Solder	Clamp	T/G
TNC Male	Straight	400PTM-C	Hex	Spring Finger	Clamp	T/G
TNC Male	Right Angle	400PTR	Hex	Solder	Clamp	T/G
7-16 DIN Male	Straight	400PDM	Hex	Solder	Clamp	T/S
7-16 DIN Female	Straight	400PDF	NA	Solder	Clamp	T/S
SMA Male	Straight	400PSM-CR	NA	Solder	Clamp	T/S

*Finish Metals: T = Tri-Metal Alloy, G = Gold, S = Silver

Cable Description

Standard Outdoor Cable, Polyethylene Jacket
 Watertight Cable, Polyethylene Jacket
 Fire Retardant Cable (CATVR), Non-Halogenated Jacket

Type Number

CNT-500
 CNT-500-DB
 CNT-500-FR

Specifications**Mechanical**

Minimum Bending Radius, <i>in (mm)</i>	1.3 (31.8)
Bending Moment, <i>lb-ft (N•m)</i>	1.75 (2.37)
Cable Weight, <i>lb/ft (kg/m)</i>	0.097 (0.14)
Tensile Strength, <i>lb (kg)</i>	260 (118)
Flat Plate Crush Strength, <i>lb/in (kg/mm)</i>	50 (0.89)

Construction Materials

Inner Conductor	Solid BC
Dielectric	Foam Polyethylene
Outer Conductor	Aluminum Tape
Overall Braid	Tinned Copper

Dimensions

Diameter Inner Conductor, <i>in (mm)</i>	0.142 (3.61)
Diameter Dielectric, <i>in (mm)</i>	0.370 (9.40)
Diameter Outer Conductor, <i>in (mm)</i>	0.376 (9.55)
Diameter Overall Braid, <i>in (mm)</i>	0.405 (10.29)
Diameter over Jacket, <i>in (mm)</i>	0.500 (12.70)

Environmental

Storage Temperature, °C (°F)	-70 to +85 (-94 to +185)
Installation Temperature, °C (°F)	-40 to +85 (-40 to +185)
Operating Temperature, °C (°F)	-40 to +85 (-40 to +185)

Electrical

Impedance, <i>ohms</i>	50 ± 2
Maximum Frequency, <i>GHz</i>	12.6
Velocity, <i>percent</i>	86
dc Breakdown, <i>volts</i>	3000
Peak Power Rating, <i>kW</i>	22
dc Resistance, <i>ohms/1000 ft (1000 m)</i>	
Inner Conductor	0.82 (2.69)
Outer Conductor	1.27 (4.17)
Jacket Spark, <i>volts RMS</i>	8000
Capacitance, <i>pF/ft (m)</i>	23.6 (77.40)
Inductance, <i>μH/ft (m)</i>	0.059 (0.19)

Attenuation and Average Power Ratings

Frequency <i>MHz</i>	Attenuation <i>dB/100 ft</i>	Attenuation <i>dB/100 m</i>	Average Power, <i>kW</i>
2300	5.2	17.0	0.45
2400	5.3	17.4	0.44
2500	5.4	17.8	0.43
5200	8.2	26.8	0.31
5300	8.3	27.1	0.31
5400	8.4	27.4	0.31
5500	8.5	27.7	0.30
5600	8.5	28.0	0.30
5700	8.6	28.3	0.30
5800	8.7	28.6	0.30
5900	8.8	28.9	0.29
6000	8.9	29.1	0.29

Standard Conditions: For Attenuation: VSWR 1.0, ambient temperature 20°C (68°F).
 For Average Power: VSWR 1.0, ambient temperature 40°C (104°F), inner conductor
 temperature 100°C (212°F), sea level, dry air, atmospheric pressure, no solar loading.

Accessories**Description****Type Number**

Cable Stripping Tool	BCPT-500
Crimping Tool	CTBC-1
Grounding Kit, 24 in. lead, 2 hole lug	GK-500
Nylon Cable Ties, Pack of 50	CT-CNT
Standard Weatherproofing Kit	WK-CNT

Connectors

Interface	Description	Part Number	Coupling Nut	Inner Contact Attachment	Outer Contact Attachment	Finish* Body/Pin
N Male	Straight	500PNM-H	Hex	Solder	Clamp	T/G
N Male	Right Angle	500PNR-H	Hex	Solder	Clamp	T/G
N Female	Straight	500PNF	NA	Solder	Clamp	T/G
TNC Male	Straight	500PTM	Hex	Solder	Clamp	T/G

*Finish Metals: T = Tri-Metal Alloy, G = Gold

Cable Description

Standard Outdoor Cable, Polyethylene Jacket
 Watertight Cable, Polyethylene Jacket
 Fire Retardant Cable (CATVR), Non-Halogenated Jacket

Type Number

CNT-600
 CNT-600-DB
 CNT-600-FR

Specifications**Mechanical**

Minimum Bending Radius, <i>in (mm)</i>	1.5 (38.1)
Bending Moment, <i>lb-ft (N•m)</i>	2.75 (3.73)
Cable Weight, <i>lb/ft (kg/m)</i>	0.131 (0.20)
Tensile Strength, <i>lb (kg)</i>	350 (158.9)
Flat Plate Crush Strength, <i>lb/in (kg/mm)</i>	60 (1.07)

Construction Materials

Inner Conductor	Solid BC
Dielectric	Foam Polyethylene
Outer Conductor	Aluminum Tape
Overall Braid	Tinned Copper

Dimensions

Diameter Inner Conductor, <i>in (mm)</i>	0.176 (4.47)
Diameter Dielectric, <i>in (mm)</i>	0.455 (11.56)
Diameter Outer Conductor, <i>in (mm)</i>	0.461 (11.71)
Diameter Overall Braid, <i>in (mm)</i>	0.490 (12.45)
Diameter over Jacket, <i>in (mm)</i>	0.590 (14.99)

Environmental

Storage Temperature, °C (°F)	-70 to +85 (-94 to +185)
Installation Temperature, °C (°F)	-40 to +85 (-40 to +185)
Operating Temperature, °C (°F)	-40 to +85 (-40 to +185)

Electrical

Impedance, <i>ohms</i>	50 ± 2
Maximum Frequency, <i>GHz</i>	10.3
Velocity, <i>percent</i>	87
dc Breakdown, <i>volts</i>	4000
Peak Power Rating, <i>kW</i>	40
dc Resistance, <i>ohms/1000 ft (1000 m)</i>	
Inner Conductor	0.53 (1.74)
Outer Conductor	1.2 (3.94)
Jacket Spark, <i>volts RMS</i>	8000
Capacitance, <i>pF/ft (m)</i>	23.4 (76.8)
Inductance, <i>μH/ft (m)</i>	0.058 (0.19)

Attenuation and Average Power Ratings

Frequency <i>MHz</i>	Attenuation <i>dB/100 ft</i>	Attenuation <i>dB/100 m</i>	Average Power, <i>kW</i>
2300	4.2	13.7	0.55
2400	4.3	14.1	0.53
2500	4.4	14.4	0.52
5200	6.8	22.2	0.39
5300	6.8	22.4	0.38
5400	6.9	22.7	0.38
5500	7.0	22.9	0.38
5600	7.1	23.2	0.37
5700	7.1	23.4	0.37
5800	7.2	23.7	0.37
5900	7.3	23.9	0.36
6000	7.4	24.2	0.36

Standard Conditions: For Attenuation: VSWR 1.0, ambient temperature 20°C (68°F).
 For Average Power: VSWR 1.0, ambient temperature 40°C (104°F), inner conductor
 temperature 100°C (212°F), sea level, dry air, atmospheric pressure, no solar loading.

Accessories**Description**

Cable Stripping Tool
 Crimping Tool
 Grounding Kit, 24 in. lead, 2 hole lug
 Hoisting Grip

Type Number

BCPT-600
 CTBC-1
 GK-600
 HG-600

Description

Nylon Cable Ties, Pack of 50
 Standard Hangers, Kit of 10
 Standard Weatherproofing Kit
 Standard 4" Cable Entry Boot, 3 hole

Type Number

CT-CNT
 SH-600
 WK-CNT
 CEB-600-3

Connectors

Interface	Description	Part Number	Coupling Nut	Inner Contact Attachment	Outer Contact Attachment	Finish* Body/Pin
N Male	Straight	600PNM-H	Hex	Solder	Clamp	T/G
N Male	Straight	600PNM-HC	Hex	Spring Finger	Clamp	T/G
N Male	Right Angle	600PNR-H	Hex	Solder	Clamp	T/G
N Female	Bulkhead	600PNF-BH	NA	Solder	Clamp	T/G
N Female	Bulkhead	600PNF-BHC	NA	Spring Finger	Clamp	T/G
TNC Male	Straight	600PTM-C	Hex	Spring Finger	Clamp	T/G
7-16 DIN Male	Straight	600PDM	Hex	Solder	Clamp	T/S
7-16 DIN Male	Straight	600PDM-C	Hex	Spring Finger	Clamp	T/S
7-16 DIN Female	Straight	600PDF	NA	Solder	Clamp	T/S

*Finish Metals: T = Tri-Metal Alloy, G = Gold, S = Silver

Cable Description

Indoor, Blue Halogenated, Fire-Retardant Jacket

Type Number

HFC6P-SCS

Specifications**Mechanical**

Diameter over Jacket, <i>in (mm)</i>	0.29 (7.37)
Jacket Thickness, <i>in (mm)</i>	0.02 (0.51)
Diameter over Outer Conductor, <i>in (mm)</i>	0.25 (6.35)
Diameter over Inner Conductor, <i>in (mm)</i>	0.043 (1.1)
Tensile Strength, <i>lb (kg)</i>	100 (45)
Flat Plate Crush Strength, <i>lb/in (kg/mm)</i>	80 (1.4)
Minimum Bending Radius, <i>in (mm)</i>	1 (25)
Bending Moment, <i>lb-ft (N•m)</i>	1 (1.4)

Construction Materials

Inner Conductor	Copper-clad Steel Wire
Dielectric	Polyethylene Spline
Outer Conductor	Corrugated Copper

Environmental

Operating Temperature, °C (°F)	-40 to +85 (-40 to +185)
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Electrical

Impedance, <i>ohms</i>	75 ± 2.0
Velocity, %	81
Peak Power Rating, <i>kW</i>	6
dc Resistance, <i>ohms/kft (ohms/km)</i>	
Inner Conductor	26.7 (87.6)
Outer Conductor	2.0 (6.6)
Capacitance, <i>pF/ft (m)</i>	16.5 (54.1)
dc Breakdown, <i>volts</i>	1900
Insulation Resistance, <i>Mohm</i>	100000

Maximum Attenuation

Frequency <i>MHz</i>	Attenuation <i>dB/100 ft</i>	Attenuation <i>dB/100 m</i>
5	0.55	1.80
55	1.36	4.45
83	1.67	5.49
187	2.55	8.36
211	2.71	8.91
250	2.97	9.73
300	3.27	10.70
350	3.54	11.60
400	3.80	12.50
450	4.05	13.30
500	4.28	14.00
550	4.50	14.80
600	4.72	15.50
750	5.32	17.50
865	5.75	18.90
1000	6.22	20.40

Standard Conditions: VSWR 1.0, ambient temperature 20°C (68°F).

Connectors

Description	Part Number
Pass through Pin	ACH6F
Captivated Pin	ACH6F-C

*Contact Andrew for additional cable constructions.

Cable Description

Indoor, Blue Halogenated, Fire-Retardant Jacket

Type Number

HFC11P-SCS

Specifications**Mechanical**

Diameter over Jacket, <i>in (mm)</i>	0.415 (10.5)
Jacket Thickness, <i>in (mm)</i>	0.02 (0.51)
Diameter over Outer Conductor, <i>in (mm)</i>	0.375 (9.53)
Diameter over Inner Conductor, <i>in (mm)</i>	0.0661 (1.68)
Tensile Strength, <i>lb (kg)</i>	150 (68)
Flat Plate Crush Strength, <i>lb/in (kg/mm)</i>	1.8 (100)
Minimum Bending Radius, <i>in (mm)</i>	1 (25)
Bending Moment, <i>lb-ft (N•m)</i>	1.7 (2.3)

Construction Materials

Inner Conductor	Copper-clad Steel Wire
Dielectric	Polyethylene Spline
Outer Conductor	Corrugated Copper

Environmental

Operating Temperature, °C (°F)	-40 to +85 (-40 to +185)
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Electrical

Impedance, <i>ohms</i>	75 ± 2.0
Frequency, maximum, <i>MHz</i>	1000
Velocity, %	82
Peak Power Rating, <i>kW</i>	11.3
dc Resistance, <i>ohms/kft (ohms/km)</i>	
Inner Conductor	11.9 (39.1)
Outer Conductor	1.52 (5.0)
Capacitance, <i>pF/ft (m)</i>	52.2 (15.9)
Inductance, <i>mH/ft (mH/m)</i>	0.096 (0.31)
dc Breakdown, <i>volts</i>	2600
Insulation Resistance, <i>Mohm</i>	100000

Maximum Attenuation

Frequency <i>MHz</i>	Attenuation <i>dB/100 ft</i>	Attenuation <i>dB/100 m</i>
5	0.273	0.894
55	0.924	3.03
83	1.14	3.75
187	1.75	5.74
211	1.86	6.12
250	2.04	6.69
300	2.25	7.38
350	2.44	8.01
400	2.63	8.61
450	2.8	9.18
500	2.96	9.72
550	3.12	10.2
600	3.27	10.7
750	3.70	12.1
865	4.01	13.1
1000	6.22	20.40

Standard Conditions: VSWR 1.0, ambient temperature 20°C (68°F).

Connectors

Description	Part Number
Captivated Pin	ACH11F

*Contact Andrew for additional cable constructions.

Cable Description

Outdoor, Blue Polyethylene, Burial Jacket

Type Number

HFC6V-VCS

Specifications**Mechanical**

Diameter over Jacket, <i>in (mm)</i>	0.258 (6.55)
Jacket Thickness, <i>in (mm)</i>	0.2 (0.51)
Diameter over Outer Conductor, <i>in (mm)</i>	0.218 (5.54)
Diameter over Foam Dielectric, <i>in (mm)</i>	0.17 (4.4)
Diameter over Inner Conductor, <i>in (mm)</i>	0.041 (1.04)
Minimum Bending Radius, <i>in (mm)</i>	2.5 (63)
Bending Moment, <i>lb-ft (N•m)</i>	0.5 (0.68)
Messenger Wire	
Diameter, <i>in (mm)</i>	0.051 (1.3)
Break Strength, <i>lb (kg)</i>	180 (82)

Construction Materials

Inner Conductor	Copper-clad Steel Wire
Dielectric	Polyethylene Spline
Outer Conductor	Corrugated Copper

Environmental

Operating Temperature, °C (°F)	-55 to +85 (-67 to +185) PE Jacket
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Electrical

Impedance, <i>ohms</i>	75 ± 2.0
Velocity, %	83
Insulation Resistance, <i>Mohm</i>	100000

Maximum Attenuation

Frequency <i>MHz</i>	Attenuation <i>dB/100 ft</i>	Attenuation <i>dB/100 m</i>
5	0.56	1.84
55	1.45	4.75
83	1.79	5.86
187	2.71	8.89
211	2.88	9.46
250	3.15	10.3
300	3.46	11.3
350	3.75	12.3
400	4.02	13.2
450	4.27	14.0
500	4.51	14.8
600	4.96	16.3
750	5.59	18.3
865	6.02	19.8
1000	6.51	21.3

Standard Conditions: VSWR 1.0, ambient temperature 20°C (68°F).

Connectors

Description	Part Number
Pass through Pin	FCA6F
Captivated Pin	FCA6F-C

*Contact Andrew for additional cable constructions.

Cable Description

Outdoor, Black Polyethylene, Burial Jacket

Type Number

HFC11V-VCS

Specifications**Mechanical**

Diameter over Jacket, <i>in (mm)</i>	0.345 (8.8)
Jacket Thickness, <i>in (mm)</i>	0.02 (0.51)
Diameter over Outer Conductor, <i>in (mm)</i>	0.305 (7.75)
Diameter over Foam Dielectric, <i>in (mm)</i>	0.27 (6.7)
Diameter over Inner Conductor, <i>in (mm)</i>	0.064 (1.63)
Minimum Bending Radius, <i>in (mm)</i>	3 (75)
Bending Moment, <i>lb-ft (N•m)</i>	1 (1.4)
Messenger Wire	
Diameter, <i>in (mm)</i>	0.072 (1.83)
Break Strength, <i>lb (kg)</i>	365 (166)

Construction Materials

Inner Conductor	Copper-clad Steel Wire
Dielectric	Polyethylene Foam
Outer Conductor	Corrugated Copper

Environmental

Operating Temperature, °C (°F)	-55 to +85 (-67 to +185)
	PE Jacket

Electrical

Impedance, <i>ohms</i>	75 ± 2.0
Velocity, %	86
Insulation Resistance, <i>Mohm</i>	100000

Maximum Attenuation

Frequency <i>MHz</i>	Attenuation <i>dB/100 ft</i>	Attenuation <i>dB/100 m</i>
5	0.274	0.899
55	0.923	3.03
83	1.14	3.74
187	1.73	5.68
211	1.84	6.05
250	2.02	6.61
300	2.22	7.27
350	2.40	7.89
400	2.58	8.46
450	2.74	9.0
500	2.90	9.52
550	3.05	10.0
600	3.20	10.5
750	3.60	11.8
865	3.89	12.8
1000	6.51	21.3

Standard Conditions: VSWR 1.0, ambient temperature 20°C (68°F).

Connectors

Description	Part Number
Captivated Pin	ACH11F

*Contact Andrew for additional cable constructions.

Cable Description

Black PVC Jacket
 Black PE with Flooding Compound
 Black PVC with Messenger

Type Number

A660-BV
 A660-BF
 A660-BVM

Specifications**Mechanical**

Temperature Ratings, Operating, °C -40 to 80°
 Messenger Diameter, *in (mm)* 0.051 (1.3)
 Messenger Breaking Strength, *lbs (kg)* 365 (166)

Construction Materials

Inner Conductor Bare Copper-clad Steel Wire
 Dielectric Foam Polyethylene
 Outer Conductor Bonded Aluminum Foil
 +60% Aluminum Braid

Dimensions

Diameter over Jacket, *in (mm)* 0.272 (6.91)
 Jacket Wall Thickness, *in (mm)* 0.030 (0.76)
 O.D. over Tape, Nominal, *in (mm)* 0.187 (4.75)
 Foam Dielectric O.D., *in (mm)* 0.180 (4.57)
 Inner Conductor O.D., *in (mm)* 0.040 (1.016)

Electrical

Characteristic Impedance, *Ohms* 75
 Velocity, % 85
 dc Resistance, *Ohms/1000 ft (1000 m)* 46.2 (152)
 dc Withstand Voltage, *volts* 1500 MIN.
 Jacket Spark, *volts RMS* 1500 MIN.
 Insulation Resistance, *Mohms-kft* 5000 MIN.

Maximum Attenuation

Frequency <i>MHz</i>	Attenuation <i>dB/100 ft</i>	Attenuation <i>dB/100 m</i>
5	0.58	1.90
55	1.60	5.25
211	3.05	10.00
250	3.30	10.82
300	3.55	11.64
400	4.15	13.61
450	4.40	14.43
550	4.90	16.08
750	5.65	18.54
1000	6.55	21.49

Standard Conditions: VSWR 1.0, ambient temperature 20°C (68°F).

Cable Description

Black PVC
 Black PE with Flooding Compound
 Black PVC with Messenger

Type Number

A6TS-BV
 A6TS-BF
 A6TS-BVM

Specifications**Mechanical**

Temperature Ratings, Operating, °C -40 to 80°
 Messenger Diameter, *in (mm)* 0.051 (1.3)
 Messenger Breaking Strength, *lbs (kg)* 180 (82)

Construction Materials

Inner Conductor Bare Copper-clad Steel Wire
 Dielectric Foam Polyethylene
 Outer Conductor Bonded Foil +60% Braid +
 Non-bonded Foil

Dimensions

Diameter over Jacket, *in (mm)* 0.277 (7.04)
 Jacket Wall Thickness, *in (mm)* 0.030 (0.76)
 O.D. over Inner Tape, nominal, *in (mm)* 0.187 (4.75)
 Foam Dielectric O.D., *in (mm)* 0.180 (4.57)
 Inner Conductor O.D., *in (mm)* 0.040 (1.016)

Electrical

Characteristic Impedance, *Ohms* 75 ± 3.0
 Velocity, % 85
 dc Resistance, *Ohms/1000 ft (1000 m)* 43.0 (141)
 dc Withstand Voltage, *volts* 1500 MIN.
 Jacket Spark, *volts RMS* 1500 MIN.
 Insulation Resistance, *Mohms-kft* 5000 MIN.

Maximum Attenuation

Frequency <i>MHz</i>	Attenuation <i>dB/100 ft</i>	Attenuation <i>dB/100 m</i>
5	0.58	1.90
55	1.60	5.25
211	3.05	10.00
250	3.30	10.82
300	3.55	11.64
400	4.15	13.61
450	4.40	14.43
550	4.90	16.08
750	5.65	18.54
1000	6.55	21.49

Standard Conditions: VSWR 1.0, ambient temperature 20°C (68°F).

Cable Description

Black PVC
 Black PE with Flooding Compound
 Black PVC with Messenger

Type Number

A6TS-BV
 A6TS-BF
 A6TS-BVM

Specifications**Mechanical**

Temperature Ratings, Operating, °C -40 to 80°
 Messenger Diameter, *in (mm)* 0.051 (1.3)
 Messenger Breaking Strength, *lbs (kg)* 180 (82)

Construction Materials

Inner Conductor Bare Copper-clad Steel Wire
 Dielectric Foam Polyethylene
 Outer Conductor Bonded Aluminum Foil
 +90% Aluminum Braid

Dimensions

Diameter over Jacket, *in (mm)* 0.272 (6.91)
 Jacket Wall Thickness, *in (mm)* 0.034 (0.86)
 O.D. over Tape, Nominal, *in (mm)* 0.187 (4.75)
 Foam Dielectric O.D., *in (mm)* 0.180 (4.57)
 Inner Conductor O.D., *in (mm)* 0.040 (1.016)

Electrical

Characteristic Impedance, *Ohms* 75 ± 3.0
 Velocity, % 85
 dc Resistance, , *Ohms/1000 ft (1000 m)* 46.2 (152)
 dc Withstand Voltage, *volts* 1500 MIN.
 Jacket Spark, *volts RMS* 1500 MIN.
 Insulation Resistance, *Mohms-kft* 5,000 MIN.

Maximum Attenuation

Frequency <i>MHz</i>	Attenuation <i>dB/100 ft</i>	Attenuation <i>dB/100 m</i>
5	0.58	1.90
55	1.60	5.25
211	3.05	10.00
250	3.30	10.82
300	3.55	11.64
400	4.15	13.61
450	4.40	14.43
550	4.90	16.08
750	5.65	18.54
1000	6.55	21.49

Standard Conditions: VSWR 1.0, ambient temperature 20°C (68°F).

Cable Description

Black PVC
 Black PE with Flooding Compound
 Black PVC with Messenger

Type Number

A1160-BV
 A1160-BF
 A1160-BVM

Specifications

Mechanical

Temperature Ratings, Operating, °C -40 to 80°
 Messenger Diameter, *in (mm)* 0.072 (1.8)
 Messenger Breaking Strength, *lbs (kg)* 365 (166)

Construction Materials

Inner Conductor Bare Copper-clad Steel Wire
 Dielectric Foam Polyethylene
 Outer Conductor Bonded Aluminum Foil
 +60% Aluminum Braid

Dimensions

Diameter over Jacket, *in (mm)* 0.395 (10.03)
 Jacket Wall Thickness, *in (mm)* 0.042 (1.07)
 O.D. over Tape, Nominal, *in (mm)* 0.287 (7.29)
 Foam Dielectric O.D., *in (mm)* 0.280 (7.11)
 Inner Conductor O.D., *in (mm)* 0.064 (1.626)

Electrical

Characteristic Impedance, *Ohms* 75 ± 3.0
 Velocity, Nominal, % 85
 dc Resistance, *Ohms/1000 ft (1000 m)* 21.5 (71)
 dc Withstand Voltage, *volts* 1500 MIN.
 Jacket Spark, *volts RMS* 1500 MIN.
 Insulation Resistance, *Mohms-kft* 5000 MIN.

Maximum Attenuation

Frequency <i>MHz</i>	Attenuation <i>dB/100 ft</i>	Attenuation <i>dB/100 m</i>
5	0.38	1.25
55	0.96	3.15
211	1.90	6.23
250	2.05	6.72
300	2.25	7.38
400	2.60	8.53
450	2.75	9.02
550	3.04	9.97
750	3.65	11.97
1000	4.35	14.27

Standard Conditions: VSWR 1.0, ambient temperature 20°C (68°F).

Cable Description	Type Number
Black PVC	A11TS-BV
Black PE with Flooding Compound	A11TS-BF
Black PVC with Messenger	A11TS-BVM

Specifications

Mechanical

Temperature Ratings, Operating, °C	-40 to 80°
Messenger Diameter, <i>in (mm)</i>	0.072 (1.8)
Messenger Breaking Strength, <i>lbs (kg)</i>	365 (166)

Construction Materials

Inner Conductor	Bare Copper-clad Steel Wire
Dielectric	Foam Polyethylene
Outer Conductor	Bonded Foil +60% Braid + Non-bonded Foil

Dimensions

Diameter over Jacket, <i>in (mm)</i>	0.400 (10.16)
Jacket Wall Thickness, <i>in (mm)</i>	0.042 (1.07)
O.D. over Tape, Nominal, <i>in (mm)</i>	0.287 (7.29)
Foam Dielectric O.D., <i>in (mm)</i>	0.280 (7.11)
Inner Conductor O.D., <i>in (mm)</i>	0.064 (1.626)

Electrical

Characteristic Impedance, <i>Ohms</i>	75 ± 3.0
Velocity, Nominal, %	85
dc Resistance, <i>Ohms/1000 ft (1000 m)</i>	18.8 (62)
dc Withstand Voltage, <i>volts</i>	1500 MIN.
Jacket Spark, <i>volts RMS</i>	1500 MIN.
Insulation Resistance, <i>Mohms-kft</i>	5000 MIN.

Maximum Attenuation

Frequency <i>MHz</i>	Attenuation <i>dB/100 ft</i>	Attenuation <i>dB/100 m</i>
5	0.38	1.25
55	0.96	3.15
211	1.90	6.23
250	2.05	6.72
300	2.25	7.38
400	2.60	8.53
450	2.75	9.02
550	3.04	9.97
750	3.65	11.97
1000	4.35	14.27

Standard Conditions: VSWR 1.0, ambient temperature 20°C (68°F).

Cable Description

Black PVC
 Black PE with Flooding Compound
 Black PVC with Messenger

Type Number

A5967-BV
 A5967-BF
 A5967-BVM

Specifications

Mechanical

Temperature Ratings, Operating, °C -40 to 80°
 Messenger Diameter, *in (mm)* 0.051 (1.6)
 Messenger Breaking Strength, *lbs (kg)* 180 (82)

Construction Materials

Inner Conductor Bare Copper-clad Steel Wire
 Dielectric Foam Polyethylene
 Outer Conductor Bonded Aluminum Foil
 +67% Aluminum Braid

Dimensions

Diameter over Jacket, *in (mm)* 0.240 (6.10)
 Jacket Wall Thickness, *in (mm)* 0.032 (0.81)
 O.D. over Tape, Nominal, *in (mm)* 0.151 (3.84)
 Foam Dielectric O.D., *in (mm)* 0.144 (3.66)
 Inner Conductor O.D., *in (mm)* 0.032 (0.813)

Electrical

Characteristic Impedance, *Ohms* 75 ± 3.0
 Velocity, Nominal, % 85
 dc Resistance, *Ohms/1000 ft (1000 m)* 67.9 (223)
 dc Withstand Voltage, *volts* 1500 MIN.
 Jacket Spark, *volts RMS* 1500 MIN.
 Insulation Resistance, *Mohms-kft* 5000 MIN.

Maximum Attenuation

Frequency <i>MHz</i>	Attenuation <i>dB/100 ft</i>	Attenuation <i>dB/100 m</i>
5	0.86	2.82
55	2.05	6.73
211	3.80	12.47
250	4.10	13.45
300	4.45	14.60
400	5.10	16.73
450	5.40	17.72
550	5.95	19.52
750	6.97	22.87
1000	8.12	26.64

Standard Conditions: VSWR 1.0, ambient temperature 20°C (68°F).

Cable Description

Black PVC
 Black PE with Flooding Compound
 Black PVC with Messenger

Type Number

A59TS-BV
 A59TS-BF
 A59TS-BVM

Specifications**Mechanical**

Temperature Ratings, Operating, °C -40 to 80°
 Messenger Diameter, *in (mm)* 0.051 (1.6)
 Messenger Breaking Strength, *lbs (kg)* 180 (82)

Construction Materials

Inner Conductor Bare Copper-clad Steel Wire
 Dielectric Foam Polyethylene
 Outer Conductor Bonded Foil
 +67% Braid + Non-bonded Foil

Dimensions

Diameter over Jacket, *in (mm)* 0.245 (6.22)
 Jacket Wall Thickness, *in (mm)* 0.032 (0.81)
 O.D. over Tape, Nominal, *in (mm)* 0.151 (3.84)
 Foam Dielectric O.D., *in (mm)* 0.144 (3.66)
 Inner Conductor O.D., *in (mm)* 0.032 (0.813)

Electrical

Characteristic Impedance, *Ohms* 75 ± 3.0
 Velocity, Nominal, % 85
 dc Resistance, *Ohms/1000 ft (1000 m)* 63.7 (209)
 dc Withstand Voltage, *volts* 1500 MIN.
 Jacket Spark, *volts RMS* 1500 MIN.
 Insulation Resistance, *Mohms-kft* 5000 MIN.

Maximum Attenuation

Frequency <i>MHz</i>	Attenuation <i>dB/100 ft</i>	Attenuation <i>dB/100 m</i>
5	0.86	2.82
55	2.05	6.73
211	3.80	12.47
250	4.10	13.45
300	4.45	14.60
400	5.10	16.73
450	5.40	17.72
550	5.95	19.52
750	6.97	22.87
1000	8.12	26.64

Standard Conditions: VSWR 1.0, ambient temperature 20°C (68°F).

Cable Description

Premium Waveguide, Standard Jacket, 5.0–5.6 GHz
 Premium Waveguide, Standard Jacket, 5.725–6.425 GHz

Type Number

EWP52-50
 EWP52-58

Specifications**Mechanical**

Minimum Bending Radii, without rebending	
E Plane, in (mm)	8 (200)
H Plane, in (mm)	22 (560)
Minimum Bending Radii, with rebending	
E Plane, in (mm)	12 (305)
H Plane, in (mm)	32 (810)
Maximum Twist, degrees/foot (m)	1 (3)
Dimensions over Jacket, in (mm)	2.21 x 1.26 (56.1 x 32.0)
Weight, pounds per foot (kg/m)	0.59 (0.88)

* Actual usable range is limited by the connecting rectangular waveguide.

** UL® listed Type CATVR.

Electrical

Maximum Frequency Range, GHz	4.6-6.425*
eTE11 Mode Cutoff Frequency, GHz	3.65
Group Delay at 6.2 GHz, ns/100 ft (ns/100 m)	124 (408)
Peak Power Rating at 6 GHz	
with 152 Series Connectors, kW	153
with 153 Series Connectors, kW	92

Attenuation and Average Power Ratings

Frequency MHz	Attenuation dB/100 ft (dB/100 m)	Average Power Rating, kW	Group Velocity of Propagation, %
5.0	1.41 (4.63)	5.06	68.3
5.2	1.35 (4.42)	5.31	71.2
5.4	1.30 (4.26)	5.51	73.7
5.6	1.26 (4.13)	5.69	75.8
5.8	1.23 (4.02)	5.84	77.7
5.85	1.22 (4.00)	5.87	78.1
5.925	1.21 (3.96)	5.92	78.8
6.0	1.20 (3.93)	5.96	79.4
6.2	1.18 (3.86)	6.07	80.8
6.4	1.16 (3.80)	6.17	82.1
6.425	1.16 (3.80)	6.18	83.2

Attenuation values based on VSWR 1.0, ambient temperature 24°C (75°F) and are guaranteed within ±5%. Average power ratings based on VSWR 1.0 and 42°C (76°F) temperature rise over 40°C (104°F) ambient. Standard Conditions:

Accessories**Hangers and Adapters**

Description	Type Number
Hanger Kit of 10, Recommended maximum spacing for outdoor installation is 3.5 ft (1.07 m)*	42396A-8
Snap-In Hanger Kit of 10, Recommended spacing for outdoor installation is 3.5 ft (1.07 m)	EWSH-52
Hardware Kit of 10, 3/8" bolts, lock washers, nuts	
3/4 in (19 mm) long	31769-5
1 in (25 mm) long	31769-1
Angle Adapter Kit of 10, Stainless Steel	31768A
Angle Adapter Kit of 10, Galvanized	
3/8" Hardware	242774
Metric Hardware	242774-M
Round Member Adapter Kit of 10, Stainless Steel	
Member Diameter	
1–2 in (25–50 mm)	31670-1
2–3 in (50–75 mm)	31670-2
3–4 in (75–100 mm)	31670-3
4–5 in (100–125 mm)	31670-4
5–6 in (125–150 mm)	31670-5
45° Adapter Kit of 10, Galvanized Steel	42334
Threaded Rod Support, 3/8" rod, nuts, washers, ceiling bracket	
12 in (305 mm) long, kit of 1	31771
12 in (305 mm) long, kit of 5	31771-4
24 in (610 mm) long, kit of 1	31771-9
24 in (610 mm) long, kit of 5	31771-6
Tower Standoff Kit of 10, 1 in (25 mm) standoff	
Member Diameter	
0.75–1.5 in (20–40 mm)	30848-5
1.5–3.0 in (40–75 mm)	30848-4
3–4 in (75–100 mm)	30848-1
4–5 in (100–125 mm)	30848-2
5–6 in (125–150 mm)	30848-3

* Standard conditions: 125 mph (200 km/h) survival wind velocity, 0.5 in (13 mm) radial ice. For other conditions see page 196.

Description**Type Number**

Tower Standoff Kit of 10, 2.5 inches (60 mm) standoff	
Member Diameter	
3–4 in (75–100 mm)	41108A-1
4–5 in (100–125 mm)	41108A-2
5–6 in (125–150 mm)	41108A-3

Other Accessories

Flaring Tool Kit for Connector Attachment	EWFTK-52
Splice	152DZ
Grounding Kit with factory attached, one-hole lug	204989-4
Grounding Kit with factory attached, two-hole lug	241088-4
Grounding Kit with field attachable crimp-on, one-hole lug	204989-24
Grounding Kit with field attachable crimp-on, two-hole lug	241088-9
Grounding Kit with field attachable screw-on lug	204989-34
Crimping Tool to field attach lug to Grounding Kit	207270
Hoisting Grip	24312A
Bending Tool Kit, One each E and H Plane tool	EWBTK-2
Connector Reattachment Kit	33544-38
Wall-Roof Feed Thru	245314-52
Waveguide Boot for Plates (below),	
4 in (102 mm) diameter	WGB4-52
5 in (127 mm) diameter	WGB5-52

Feed-Thru Plate for Boots (above)

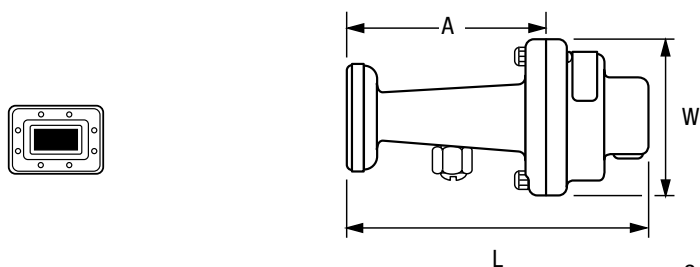
Openings	For 4 in Boots	For 5 in Boots
1	204673-1	48940-1
1	204673-2	—
2	—	48940-2
3	—	48940-3
4	204673-4	48940-4
6	—	48940-6
8	204673-8	—

Waveguide to Coaxial Adapters

Frequency* GHz	Waveguide Flange Type	Coaxial Connector Type	VSWR Max.	Type Number
4.09–7.050	CPR159G	N Female	1.15	C159CNSG
4.09–7.050	PDR58	N Female	1.15	C159HNSG
4.09–7.050	CPR137G	N Female	1.10	C137CNDG
4.09–7.050	PDR70	N Female	1.10	C137HNDG

Connectors

Type Number	L in (mm)	W in (mm)	A in (mm)	Weight lb (kg)
152SE, 152SEM	5.3 (134.6)	3.8 (97)	3.7 (94)	4.2 (1.9)
252SE, 252SEM	5.0 (127)	3.75 (95.3)	3.0 (76.2)	4.2 (1.9)



Connector Material: Brass

Ordering Information for Waveguide Assemblies

Frequency* GHz	Waveguide Type	Flange Type	Connector†		Flex-Twist 2 ft (0.6 m)
			Fixed-Tuned	Pressure Window	
Premium Waveguide Assemblies					VSWR 1.10 (26.4)**
5.0–5.6	EWP52-50	CPR159G	152SE	55001-159	F159PC0240CS
		CPR137G	252SE	55001-137	F137PC0240CG
		PDR70	252SEM	223306-70	F137MH0600HG
		PDR58	152SEM		
5.725–6.425	EWP52-58	CPR159G	152SE	55001-159	F159PC0240CA
		CPR137G	252SE	55001-137	F137PC0240CD
		PDR70	252SEM	223306-70	F137MH0600HD
		PDR58	152SEM		

* Contact Andrew for information on other frequency bands. ** VSWR max., (R.L., dB). Up to 300 ft (90 m). The indicated maximum VSWR characteristics are guaranteed for factory assemblies and are typical for field assemblies. † "Tunable" connectors ordered with factory assemblies are factory tuned.

Pressurization Equipment

Dehydrators are your first line of defense in keeping moisture out of your transmission line and maintaining optimal performance of your system. Andrew offers a wide range of pressurization solutions.

PRODUCT / FEATURES	SD-001	SD-003	DDH010	40525A	MR050	PMT200	ODPMT200
Type							
Static Desiccator	•	•					
Disposable Dehydrator			•				
Manual Regenerative Dehydrator				•	•		
Membrane Dehydrator						•	•
Volume/Application							
Jumpers (to 0.1 cu ft)	•						
Short Waveguide Run (to 1 cu ft)		•					
Waveguide (to 5 cu ft)			•				
Waveguide (to 10 cu ft)				•	•		
Waveguide (to 60 cu ft)						•	•
Power							
None	•	•					
AC (115/220)			•	•	•	•	•
DC (24/48)			•		•		
Operation							
Passive	•	•					
Active			•	•	•	•	•
Self-Regenerating						•	•
Location							
Indoor	•	•	•	•	•	•	
Outdoor	•	•	•				•

Andrew also has a wide range of pressurization accessories that complement the dehydrators in forming a complete pressurization system. They include Distribution Panels (DP-4), Manifolds (MN6600), Line Monitors (MH), Volume Tanks, and Wall-Mount Regulators.



Static Desiccators

Static desiccators are compact and economical, disposable devices which eliminate moisture in very small transmission lines and antenna feeds. The units have no moving parts and no electrical connections, yet they are capable of providing many months of protection. Static desiccators mount directly to any convenient pressure inlet having a 1/8" NPT female fitting. Mount them in a location that is easily accessible for viewing and replacement.

SD001 Static Desiccator

Typical service life of an SD-001, in a very small system of 0.1-ft³ (2.8 liters) volume, experiencing a temperature change of 22°C (40°F) per day, at 40% RH, is one year. For more information, ask for Bulletin 10564B.

SD003 Static Desiccator

Typical service life of an SD-003 in a larger system having 1-ft³ volume and experiencing a temperature change of 10°C (30°F) per day, at 40% RH, is one year.

Disposable Dehydrators

DDH010 Disposable Outdoor Dehydrator

This is a disposable, fully automatic, indoor/outdoor dehydrator designed to cover systems with volumes from 0.01 to 4 ft³ (0.01 to 113 liters). The DDH010 uses automatic pressure sensing to activate and deactivate the compressor, operating only when needed to maintain pressure in the transmission line. For more information, ask for Bulletin AE01B-A0480.



Manual and Automatic Dehydrators

40525A Basic Manual Regenerative Dehydrator

Manual regenerative dehydrators provide an economical automatic drying system. "Automatic" for the 40525A is defined as automatically responding to the pressure requirements of the system, not automatic regeneration of the desiccant. The color indicating desiccant is easily viewed through the canister attached to the unit, providing for programmed replacement. You can replace the desiccant with new desiccant or you can regenerate it. For more information, refer to our general Catalog, available on our web site, at www.andrew.com



MR050 DryLine® Advanced Manual Regenerative Dehydrator

Manual regenerative dehydrators provide an economical automatic drying system. "Automatic" for the MR050 series is defined as automatically responding to the pressure requirements of the system, not automatic regeneration of the desiccant.

The MR050 series dehydrators are designed to meet the North American and new European N-3 Standards for complete front access for installation and maintenance. The desiccant container and associated connections are readily accessible from the front of the unit. The MR050 may be rack mounted, wall mounted or self supported and is available in ac and dc versions. For more information, ask for Bulletin 1846C.



PMT200 DryLine Automatic Dehydrator

The PMT200 is a fully automatic dehydrator with an expanded range covering system volumes from 0.01 to 60 ft³ (0.01 to 1700 liters). It mounts virtually anywhere. Factory configured for direct-wall mounting, the cabinet can be turned and placed into a 19 inch rack, in a cabinet, or directly on a floor or shelf. For more information, ask for Bulletin 10561B.



ODPMT200 DryLine Automatic Outdoor Dehydrator

The ODPMT200 is a fully automatic dehydrator with an expanded range covering system volumes from 0.01 to 60 ft³ (0.01 to 1700 liters). The unit is designed for outdoor applications at remote sites. It mounts virtually anywhere. The cabinet enclosure is attached to a pedestal that can be mounted to a concrete pad or clamped to a 4-inch diameter vertical pipe. The ODPMT200 provides front access for maintenance and operational controls. Power, air, and alarm connections exit through the bottom of the enclosure. For more information, ask for Bulletin AE01B-A0466.





All designs, specifications, and availabilities of products and services presented in this bulletin are subject to change without notice.
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