

CriticalPoint™ Version 3 / Next Generation Public Safety Solution

Public Safety 700/800MHz Class A/B 27/33dBm Bi-directional Amplifier and Battery Backup Unit

Features

Public Safety Standards Compliance

- Compliance with IFC / NFPA / UL2524
- FCC Class A: PX8RX78V2F-A / Class B: PX8RX78V2F-B
- UL 2524 Standard Certified – SGS Certificate No.: TBD
- ISED (IC): TBD
- UL50E Type 4 / NEMA 4 enclosure for BDA / BBU

Bi-directional Amplifier

- Supports P25 P1/P2, digital and conventional analog communications simultaneously
- Built-in cavity filtering to protect the unit from interference from FirstNet and other neighbor bands
- Up to 64 channels per band on single band models; up to 96 channels shared across bands on dual band models (maximum of 64 on individual band) (Class A)
- Channelized Auto Level Control (ALC) supported (Class A)
- Channelized Downlink and Uplink squelch supported (Class A)
- Uplink PA shutdown during no traffic periods to minimize noise being introduced to the network (Class A)
- Built-in mandatory isolation test to prevent BDA oscillation
- Auto shutdown with alarm upon oscillation detection
- Expandable to 700/800MHz V3/NG fiber system
- Web based GUI for intelligent configuration, SNMP supported
- Integrated Battery Charger Unit, Comba BBU V2 / BBU V3/NG supported
- License based switching between Class A or Class B, Single band or Dual band, 0.5W or 2W configurations
- NFPA / IFC / UL 2524 compliant dry contact alarms, with LED displays
- External Comba Annunciator Panel supported



Battery Backup Unit

- Optional dedicated Battery Backup Solution for BDA V3/NG platform
- Supports Lithium Iron Phosphate (LiFePO4) batteries
- Supports 12 hours backup power with 30AH battery option
- Supports 24 hours backup power with 60AH battery option
- Provides connections for EPO (Emergency Power Off) switch
- Provides AC convenience outlet inside BBU



Specifications - BDA

BDA		700MHz	800MHz
Passband (Downlink / Uplink)	MHz	Configuration S0 – 700MHz: 758-775 / 788 – 805, 800MHz: 851-861 / 806-816 Configuration S1 – 700MHz: 769-775 / 799 – 805, 800MHz: 851-851 / 806-816 Configuration C0 – 700MHz: 768-776 / 798 – 806, 800MHz: 851-869 / 806-824	
Total Output Power, Uplink	dBm	27	
Total Output Power, Downlink	dBm	27 / 33	27 / 33
Maximum System Gain (Uplink / Downlink)	dB	90	90
Gain Adjustment Range (1dB step) *	dB	60-90 / 35-65 / 10-40 (Under different gain limit modes)	60-90 / 35-65 / 10-40 (Under different gain limit modes)
Pass Band Ripple, p-p (Uplink / Downlink)	dB	S0: ≤3, S1: ≤7	S0: ≤3, S1: ≤7
Uplink Noise Figure	dB	<5 (90dB Uplink Gain), <9 (67dB Uplink Gain)	
Intermodulation	dBm	≤ -13	≤ -13
Spurious	dBm	FCC Compliance	FCC Compliance
Maximum RF Input Level without Damage	dBm	0	0
Maximum RF Input Level without Overdrive	dBm	-10	-10
Input VSWR		≤ 2	≤ 2
Impedance	Ω	50	50

Class A / Class B Specialized Filtering

Number of Filters Downlink			64 per band
Number of Filter Uplink			96 Shared between 700/800MHz
Filter Bandwidth		KHz	12.5/25/75 (Class A) 75/100/150 (Class B Specialized Filtering) Additional 10MHz (LTE) for FirstNet
Filter	Bandwidth (kHz)	Delay(μs)	Out-of-Band Suppression
High rejection Filter Set	12.5	≤48	≥ 60dBc @ filter edge + 30KHz
	25	≤30	≥ 60dBc @ filter edge + 50KHz
	75	≤18	≥ 60dBc @ filter edge + 130KHz
	75 LD	≤15	≥ 60dBc @ filter edge + 200KHz
Low Delay Filter Set	12.5	≤30	≥ 60dBc @ filter edge + 65KHz
	25	≤27	≥ 60dBc @ filter edge + 75KHz
	37.5	≤26	≥ 60dBc @ filter edge + 75KHz
	50	≤26	≥ 60dBc @ filter edge + 100KHz
	75	≤15	≥ 60dBc @ filter edge + 200KHz
	100	≤14	≥ 60dBc @ filter edge + 200KHz
	150	≤13	≥ 60dBc @ filter edge + 205KHz

*Actual delay number is various according to version

Class B Wide Band

Filter Bandwidth	MHz	0.6-10
Number of Filters		3
System Group Delay	μsec	≤ 14
Out-of-Band Suppression	dBc	≥ 60 @ filter edge + 1MHz

Mechanical - BDA

BDA				
Dimensions, H x W x D		mm / in	330 x 490 x 199 / 13.0 x 19.3 x 7.8	
Weight (without bracket)		kg / lbs	25 / 55.1	
Power Supply Input		VAC	100-240V / 50-60Hz / 0-4.5A	
Power Supply Output		VDC	40-60V (Typical: 53.5V) / 0-7.5A	
Maximum Charging Current		A	5	
Power Consumption		W	27 dBm	33 dBm
	Single Band		<75	<90
	Dual Band		<85	<100
Enclosure Cooling			Convection	
RF Connectors * 2			N-Female (MT, DT), SMA-Female (FOU DL, FOU UL)	
Test Port * 2			SMA-Female (DT-Test, MT-Test)	
LED * 10			Dry Contact Alarm LED 1 - 8, ALM/RUN	
Communication port *2			RJ45 (LAN, OMT)	
Reserved knock outs			3/4-inch hole x 1, 1/2-inch hole x 3, 1-inch hole x2	
Operating Temperature		°C	-40 to +55	
Operating Humidity			≤ 95%	
Environmental Class			UL50E Type 4 / NEMA 4	
MTBF		Hr	100,000	

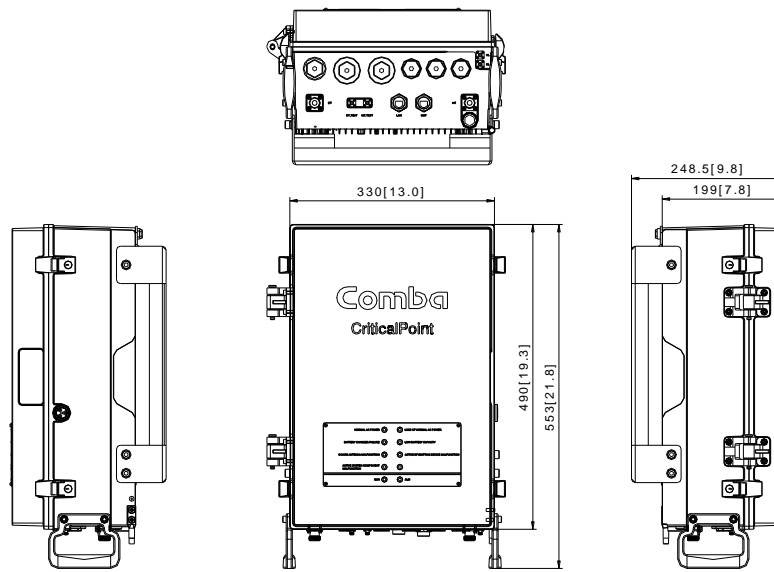
Battery Backup Unit

BBU				
Dimensions, H x W x D		mm / in	605 x 500 x 272.9 / 23.8 x 19.7 x 10.7	
Weight (without battery)		Kg / lbs	26 / 57.3	
LiFePO4 Output		VDC	Per Battery	
LiFePO4 Battery Communication Port			Serial port (RS485)	
Knockouts			3/4-inch hole x 4, 1/2-inch hole x 6	
Operating Temperature		°F (°C)	32 to 104 (0 to 40)	
Operating Humidity			≤ 95%	
Enclosure Environmental Class			UL50E Type 4 / NEMA 4	

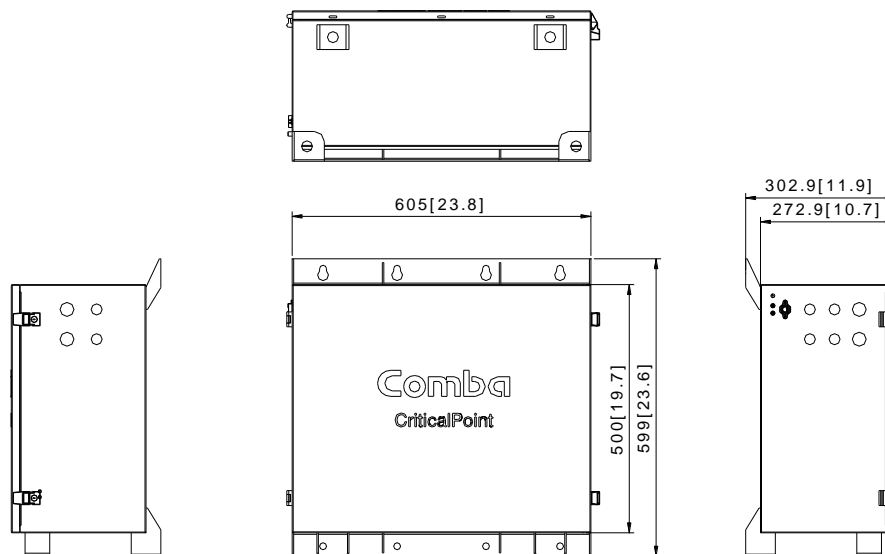
Battery				
Battery Type		(Lithium Iron Phosphate) LiFePO4		
System Required Quantity	pcs	1	1	1
Amp/Hour (Discharge at XC)		30AH	60AH	100AH
Nominal Voltage		51.2V	51.2V	51.2V
Battery Weight	lb(kg)	52.9 (24)	79.8 (36.2)	123.5 (56)
Battery Electrolyte Counts		0.456 Gallons / 4.6 lbs	0.913 Gallons / 9.1 lbs	1.758 Gallons / 17.6 lbs

Note: Gain adjusts down to 10dB total gain but is no longer FCC compliant for NF at that level

Note: Typical specifications at room temperature



BDA V3 NG



BBU V3 NG

Part Numbers

RX78V3 - A 33 27 P0 - S1

	BDA Band Configuration	S0 = 700MHz NB, 800MHz NB, FirstNet, ESMR S1 = 700MHz NB, 800MHz NB, High Rejection Duplexers C0 = Canada Version
	BDA Power Supply	P0 = AC input with internal Charger
	BDA UL Power	27 = 27dBm
	BDA DL Power	33 = 33dBm 27 = 27dBm
	BDA Class	A = Class A B = Class B
	BDA Authorized Band	07 = 700MHz single band 08 = 800MHz single band 78 = 700MHz and 800MHz dual band

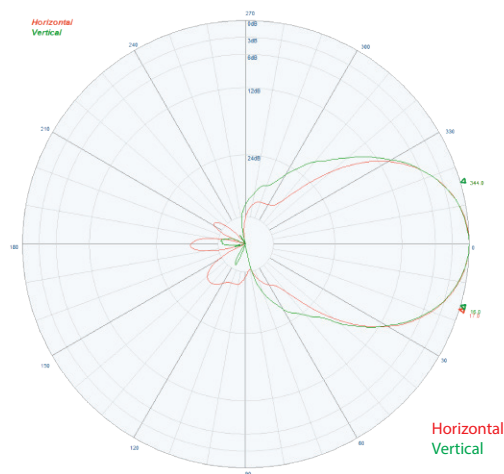
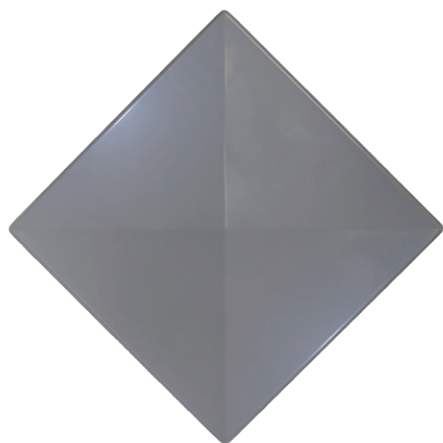
BDA Part Numbers	Band	Class	DL PWR	Duplexer Configuration
RX78V3-A3327P0-XX	700/800MHz	Class A	33dBm	XX=S1/S0/C0
RX07V3-A3327P0-XX	700MHz	Class A	33dBm	XX=S1/S0/C0
RX08V3-A3327P0-XX	800MHz	Class A	33dBm	XX=S1/S0/C0
RX78V3-A2727P0-XX	700/800MHz	Class A	27dBm	XX=S1/S0/C0
RX07V3-A2727P0-XX	700MHz	Class A	27dBm	XX=S1/S0/C0
RX08V3-A2727P0-XX	800MHz	Class A	27dBm	XX=S1/S0/C0
RX78V3-B3327P0-XX	700/800MHz	Class B	33dBm	XX=S1/S0/C0
RX07V3-B3327P0-XX	700MHz	Class B	33dBm	XX=S1/S0/C0
RX08V3-B3327P0-XX	700MHz	Class B	33dBm	XX=S1/S0/C0
RX78V3-B2727P0-XX	700/800MHz	Class B	27dBm	XX=S1/S0/C0

BBU Part Numbers	Battery Type	Capacity	Backup Hours
BBUV3-LFP48030	Lithium iron phosphate	30AH	>12H for 110W
BBUV3-LFP48060	Lithium iron phosphate	60AH	>24H for 110W, 12H for 220W
BBUV3-LFP48100	Lithium iron phosphate	100AH	>48H for 110W, 24H for 220W

License Part Numbers	Configuration	
RX78V3-L-2733AASS	27dBm to 33dBm upgrade license	27dBm to 33dBm upgrade license, for Single Band, Class A units
RX78V3-L-2733AADD		27dBm to 33dBm upgrade license, for Dual Band, Class A units
RX78V3-L-2733BBSS		27dBm to 33dBm upgrade license, for Single Band, Class B units
RX78V3-L-2733BBDD		27dBm to 33dBm upgrade license, for Dual Band, Class B units
RX78V3-L-3333AASD	Single Band to Dual Band upgrade license	Single band to Dual Band upgrade license, for 33dBm, Class A units
RX78V3-L-3333BBSD		Single band to Dual Band upgrade license, for 33dBm, Class B units
RX78V3-L-2727AASD		Single band to Dual Band upgrade license, for 27dBm, Class A units
Not Available		Single band to Dual Band upgrade license, for 27dBm, Class B units
RX78V3-L-3333BASS	Class B to Class A upgrade license	Class B to Class A upgrade license, for 33dBm, Single Band units
RX78V3-L-3333BADD		Class B to Class A upgrade license, for 33dBm, Dual Band units
RX78V3-L-2727BASS		Class B to Class A upgrade license, for 27dBm, Single Band units
RX78V3-L-2727BADD		Class B to Class A upgrade license, for 27dBm, Dual Band units

AD-PA-617-960-D

Low-Band High Isolation Donor Antenna



Electronic Specifications

Frequency Range	617 ~ 698 MHz	698 ~ 806 MHz	806 ~ 894 MHz	880 ~ 960 MHz
Gain	15.1 dBi	15.5 dBi	16.6 dBi	16.8 dBi
Horizontal Beamwidth	32.1°	29°	25.8°	24.3°
Vertical Beamwidth	31.6°	29.7°	26.2°	24.1°
Front-to-Back Ratio	31.0 dB	31.8 dB	30.6 dB	29.4 dB
VSWR	1.5 : 1			
Polarization	Vertical			
Intermodulation IM3	-153 dBc (2 x 43 dBm)			
Impedance	50 Ω			
Power Rating	100 W (Max)			

Mechanical Specifications

Dimension (W x D x H)	27.6 x 27.6 x 5.4 in (700 x 700 x 137 mm)
Weight (w/out Mounting Kit)	19.8 lbs (9.0 kg)
RF Connector	7-16 DIN Female
Wind Load @ 100 MPH	Front 697N, 135N, Rear 697N
Survival Wind Speed	150 MPH (Max)
Radome (Color)	ASA (Gray)

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3116 West Vanowen Street Burbank, CA 91505





Economy Multiband Omnidirectional Antenna

Model Numbers

- Ant-O\698-2.7k/N(f) Econ (CS03-019-429)
- Ant-O\698-2.7k/4.3-10 Econ (CS03-019-429-02)

Frequency Range

- 698-960/1710-2700

Features & Benefits

- Low Cost
- Multiband Design
- Covers CDMA, GSM, DCS, 3G/UMTS, LTE
- In-building coverage



Multiband Omnidirectional Antenna

Electrical Specifications

Frequency Range	698-960/1710-2700
Polarization	Vertical
Gain (dBi)	1±0.5/5±1.0
Half-power Beam Width	Hor: 360/Ver: 60/30
Impedance (Ω)	50
VSWR	≤2.0/≤1.5
Maximum Input Power (W)	50

Specifications subject to change without notice.

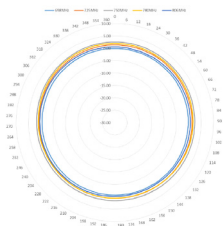
Mechanical Specifications

Connector	N (f) or 4.3-10 (f)
Size (In)	7.3x3.4
Weight (lb)	0.5
Wind Loading Area (m2)	≤0.2
Rated Wind Velocity (mph)	82
Reflector Material	Aluminum
Radome Material	ABS
Radome Color	White
Operating Temperature (F/C)	-40~131 (-40~55)

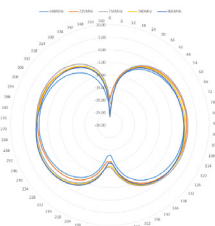


Economy Multiband Omnidirectional Antenna

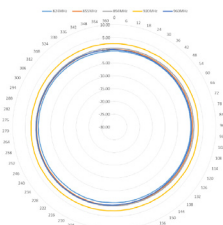
Sample Antenna Patterns*



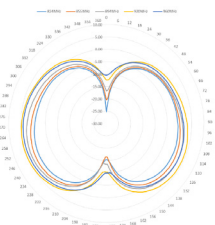
Azimuth Patterns, 698 MHz-806 MHz



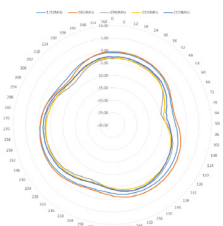
Elevation Patterns, 698 MHz-806 MHz



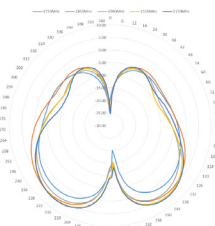
Azimuth Patterns, 824 MHz-960 MHz



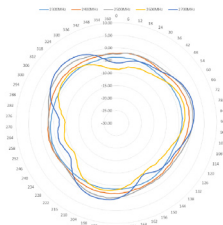
Elevation Patterns, 1710 MHz-2170 MHz



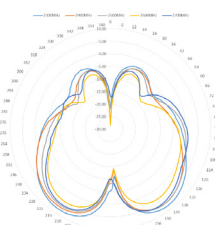
Azimuth Patterns, 2300 MHz-2700 MHz



Elevation Patterns, 2300 MHz-2700 MHz



Azimuth Patterns, 2300 MHz-2700 MHz



Elevation Patterns, 2300 MHz-2700 MHz

* Additional patterns with enlarged images are available upon request.



Wideband Directional Coupler

DC-Rxx-ON300C(XH)

Low PIM(-153dBc), 698-2700MHz, N-Female, 300W

- Wideband design covering 698-2700MHz
- Available 5, 6, 7, 8, 10, 13, 15, 20, 30 & 40dB values
- Suitable for indoor/outdoor environment
- High Reliability and Low Insertion Loss



Electrical Specification

Product Model	DC-R05-ON300C(XH)	DC-R06-ON300C(XH)	DC-R07-ON300C(XH)	DC-R08-ON300C(XH)	DC-R10-ON300C(XH)	DC-R13-ON300C(XH)	DC-R15-ON300C(XH)	DC-R20-ON300C(XH)	DC-R30-ON300C(XH)	DC-R40-ON300C(XH)
Frequency (MHz)	698-2700									
Coupling (dB)	5.0	6.0	7.0	8.0	10.0	13.0	15.0	20.0	30.0	40.0
Coupling Tolerance (dB)	± 0.8	± 0.8	± 0.8	± 0.8	± 0.8	± 1.0	± 1.0	± 1.2	± 1.5	± 1.5
Loss (dB)	≤ 2.1	≤ 1.7	≤ 1.4	≤ 1.2	≤ 0.7	≤ 0.5	≤ 0.4	≤ 0.3	≤ 0.2	≤ 0.2
Isolation (dB)	≥ 25	≥ 26	≥ 27	≥ 28	≥ 30	≥ 33	≥ 35	≥ 40	≥ 45	≥ 55
VSWR @ Input port	≤ 1.25									
PIM (dBc)	<-153 @ 2 x 43dBm									
Average Power, max (W)	300									
Peak Power, max (W)	1000									
Impedance (ohm)	50									

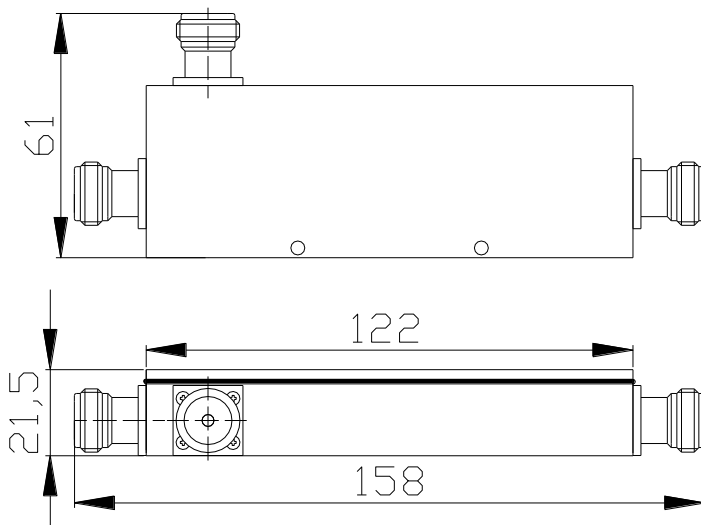
Mechanical Specification

Dimension (in/mm)	6.2x2.4x0.8 / 158x61x21.5
Weight (lb/kg)	0.75 / 0.34
Connector	N-Female

Environment & Compliance

Application	Outdoor / Indoor
Operating Temperature	-40°C to +80°C
Environment	IP65
Relative Humidity	Up to 95%
RoHS	Compliant

Outline Drawing



NMP01250 AirCell® 50 Ohm Connectors

For use with AirCell® 1/2" 50 Ohm Plenum, Conduit and In-Conduit Cables

Description	NMP01250
General Specifications	
Interface	N Male
Body Style	Straight
Electrical Specifications	
Impedance, Ohms	50
Operating Frequency Band	0.3 MHz to 6 GHz
Dielectric Withstand Voltage	2 kV DC
3rd Order IMD	-140 dBc minimum, -150 typical
3rd Order IMD, Test Method	2 x 20 Watt carriers
Average Power	0.6 kW
Peak Power, maximum	10 kW
Insertion Loss, typical	0.05
Shielding Effectiveness	-130 dB
Return Loss (VSWR)	
DC to 1 GHz	30 dB (1.06)
1 GHz to 2 GHz	31 dB (1.06)
2 GHz to 3 GHz	32 dB (1.06)
3 GHz to 4 GHz	25 dB (1.12)
4 GHz to 5 GHz	20 dB (1.22)
5 GHz to 6 GHz	15 dB (1.43)
Mechanical Specifications	
Outer Contact Plating	Silver
Inner Contact Plating	Silver
Interface Durability	500 cycles
Interface Durability Test Method	IEC 16916
Minimum Connector Pull-off Force	200 lbs
Environmental Specifications	
Operating Temperature, °F (°C)	-40° to 158° (-40° to 70°)
Storage Temperature, °F (°C)	-40° to 158° (-40° to 70°)
Installation Temperature, °F (°C)	23° to 122° (-5° to 50°)
Immersion Test Method	IEC60529:2001 IP68
Corrosion Test Method	MIL-STD-1344A
Thermal Shock Test Method	MIL-STD-202F
Vibration Test Method	MIL-STD-202F
Regulatory Compliance/Certifications	
RoHS 2011/65/EU Compliant	
TL 9000 H-V - All Cables designed and manufactured under this quality management system	

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Product Specification

50 Ohm In-Conduit Cable, 1/2" - AC012J50



Description	Product Number
Standard Cable	
1/2", Corrugated, Black Polyethylene Jacket	AC012J50
Physical Dimensions	
Center Diameter, in (mm)	0.188 (4.78)
Diameter Over Outer Conductor, in (mm)	0.550 (13.97)
Maximum Diameter Over Jacket, in (mm)	0.63 (16.00)
Center Conductor	Copper-Clad Aluminum
Outer Conductor	Corrugated Aluminum
Jacket Color	Black
Electrical Characteristics	
Maximum Frequency, GHz	10
Peak Power Rating, KW	35
DC Resistance, Ohms/1,000 ft (1,000 m)	
Center	0.46 (1.51)
Outer	0.51 (1.67)
DC Breakdown, kV	2
Capacitance, pF/ft (m)	22 (72.12)
Inductance, mH/ft (m)	0.057 (0.187)
Jacket Spark, kV RMS	8
VSWR min, (dB)	1.25 (19.0)
VSWR typical, 700-960 / 1700-2200 MHz (dB)	1.13 (24.3)
Impedance, Ohms	50 ± 2
Velocity of Propagation	94%
Mechanical Characteristics	
Minimum Bend Radius, in (mm) - Single	2 (50.8)
Minimum Bend Radius, in (mm) - Multiple	5 (127)
Cable Weight, lb/ft (kg/m)	0.11 (0.16)
Bending Moment, ft lb (N m)	1 (1.4)
Tensile Strength, lb (kg)	250 (114)
Flat Plate Crush, lb/in (kg/mm)	78 (1.39)
Number of Bends, minimum	15
Recommended Install Temp., °F (°C)	-10° to 170° (-23° to 77°)
Recommended Storage Temp., °F (°C)	-40° to 170° (-40° to 77°)
Recommended Operating Temp., °F (°C)	-40° to 170° (-40° to 77°)
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	
Regulatory Compliance/Certifications	
RoHS 2011/65/EU Compliant	
TL 9000 H-V - All Cables designed and manufactured under this quality management system	

Attenuation and Average Power			
Frequency, MHz	Attenuation		Average Power
	dB/100 ft	dB/100 m	kW
100	0.70	2.30	3.98
450	1.50	4.92	1.85
500	1.59	5.22	1.75
600	1.75	5.74	1.58
700	1.87	6.14	1.47
800	1.96	6.43	1.37
900	2.14	7.02	1.29
960	2.23	7.32	1.24
1000	2.30	7.55	1.21
1500	2.85	9.35	0.98
1700	3.05	10.01	0.98
1800	3.14	10.30	0.93
1950	3.24	10.63	0.85
2000	3.33	10.93	0.84
2100	3.42	11.22	0.82
2200	3.50	11.48	0.80
2300	3.59	11.78	0.78
2400	3.67	12.04	0.77
2500	3.75	12.30	0.75
2700	3.90	12.80	0.72
3000	4.14	13.58	0.68
3300	4.33	14.21	0.61
3400	4.45	14.60	0.60
4000	4.91	16.11	0.55
4900	5.61	18.41	0.50
5000	5.69	18.67	0.49
5200	5.92	19.42	0.48
5300	6.03	19.78	0.47
5600	6.37	20.90	0.46
5825	6.83	22.41	0.45

Trilogy AirCell® Cable

Proud to be 100% Made in the USA



Product Specification

50 Ohm Plenum Cable, 1/2" - AP6012J50

Description	Product Number
Plenum Rated Cable	
1/2", Corrugated (6 GHz), Jacketed CMP, Conforms to NFPA-262, UL-444, Canadian CSA 22.2/FT6	AP6012J50
Physical Dimensions	
Center Diameter, in (mm)	0.188 (4.78)
Diameter Over Outer Conductor, in (mm)	0.550 (13.97)
Maximum Diameter Over Jacket, in (mm)	0.63 (16.00)
Center Conductor	Copper-Clad Aluminum
Outer Conductor	Corrugated Aluminum
Jacket Color	Off White
Electrical Characteristics	
Maximum Frequency, GHz	10
Peak Power Rating, KW	35
DC Resistance, Ohms/1,000 ft (1,000 m)	
Center	0.46 (1.51)
Outer	0.51 (1.67)
DC Breakdown, kV	2
Capacitance, pF/ft (m)	22 (72.12)
Inductance, mH/ft (m)	0.057 (0.187)
Jacket Spark, kV RMS	8
VSWR min, (dB)	1.25 (19.0)
VSWR typical, 700-960 / 1700-2200 MHz (dB)	1.13 (24.3)
Impedance, Ohms	50 ± 2
Velocity of Propagation	94%
Mechanical Characteristics	
Minimum Bend Radius, in (mm) - Single	2 (50.8)
Minimum Bend Radius, in (mm) - Multiple	5 (127)
Cable Weight, lb/ft (kg/m)	0.13 (0.20)
Bending Moment, ft lb (N m)	1 (1.4)
Tensile Strength, lb (kg)	250 (114)
Flat Plate Crush, lb/in (kg/mm)	78 (1.39)
Number of Bends, minimum	15
Recommended Install Temp., °F (°C)	+5° to 194° (-15° to 90°)
Recommended Storage Temp., °F (°C)	+5° to 194° (-15° to 90°)
Recommended Operating Temp., °F (°C)	+5° to 194° (-15° to 90°)
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	
Regulatory Compliance/Certifications	
RoHS 2011/65/EU Compliant	
TL 9000 H-V - All Cables designed and manufactured under this quality management system	

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Attenuation and Average Power			
Frequency, MHz	Attenuation		Average Power
	dB/100 ft	dB/100 m	kW
100	0.70	2.30	3.98
450	1.50	4.92	1.85
500	1.59	5.22	1.75
600	1.75	5.74	1.58
700	1.87	6.14	1.47
800	1.96	6.43	1.37
900	2.14	7.02	1.29
960	2.23	7.32	1.24
1000	2.30	7.55	1.21
1500	2.85	9.35	0.98
1700	3.05	10.01	0.98
1800	3.14	10.30	0.93
1950	3.24	10.63	0.85
2000	3.33	10.93	0.84
2100	3.42	11.22	0.82
2200	3.50	11.48	0.80
2300	3.59	11.78	0.78
2400	3.67	12.04	0.77
2500	3.75	12.30	0.75
2700	3.90	12.80	0.72
3000	4.14	13.58	0.68
3300	4.33	14.21	0.61
3400	4.45	14.60	0.60
4000	4.91	16.11	0.55
4900	5.61	18.41	0.50
5000	5.69	18.67	0.49
5200	5.92	19.42	0.48
5300	6.03	19.78	0.47
5600	6.37	20.90	0.46
5825	6.83	22.41	0.45

Trilogy AirCell® Cable

Proud to be 100% Made in the USA



Type N M/F Coaxial RF Surge Protector, 125MHz - 1GHz, DC Block,
375W, 220uJ, 50kA, Blocking Cap, Bracket Up, Hole Mount

IS-50NX-C2-MA



Features

- Surge current of 20kA
- Max Power 375W
- Frequency range from 125 MHz to 1000 MHz
- N Male to N Female connectors
- VSWR <1.1:1
- Multi-strike capability
- CE & RoHS compliant

Applications

- HF, UHF and VHF radios
- Ham radios
- Remote industrial monitoring

Description

RF surge protector (also known as lightning arrester or surge arrester) IS-50NX-C2-MA from PolyPhaser, integrating a RF blocking capacitor with a gas tube (GT or GDT). This RF surge protector component is manufactured in a coaxial in-line design with wide operating frequency range. All PolyPhaser RF surge protector products are available in stock with same day shipping.

Electrical Specifications

Surge Protector Type
DC Handling

Blocking Cap and Gas Tube
DC Block

Description	Minimum	Typical	Maximum	Units
Frequency Range	125		1,000	MHz
Impedance		50		Ohms
VSWR			1.1:1	
Insertion Loss			0.1	dB
Input Power, CW			375	Watts
375W @ 125MHz TO 220MHz				
125W @ 220MHz TO 700MHz				
50W @ 700MHz TO 1000MHz				
Surge Current			50	kA
IEC 61000-4-5 8/20μs WAVEFORM				
Turn On Voltage		600 20%		Volts
Throughput Energy			220	uJ
@ 3kA, 8/20μs WAVEFORM				

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:
Type N M/F Coaxial RF Surge Protector, 125MHz - 1GHz, DC Block, 375W, 220uJ, 50kA, Blocking Cap, Bracket Up, Hole Mount IS-50NX-C2-MA

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Mechanical Specifications

Width/Diameter	1.75 in [44.45 mm]
Height	1.5 in [38.1 mm]
Weight	0.35 lbs [158.76 g]

Configuration

Input Connector	N Male
Output Connector	N Female

Environmental Specifications

Temperature

Operating Range	-50 to +50 deg C
Storage Range	-55 to +85 deg C

Ingress Protection (IP) Rating	None
Vibration	1G up to 100Hz

Compliance Certifications

CE Compliant	Yes
UL	UL497E

Plotted and Other Data

Notes:

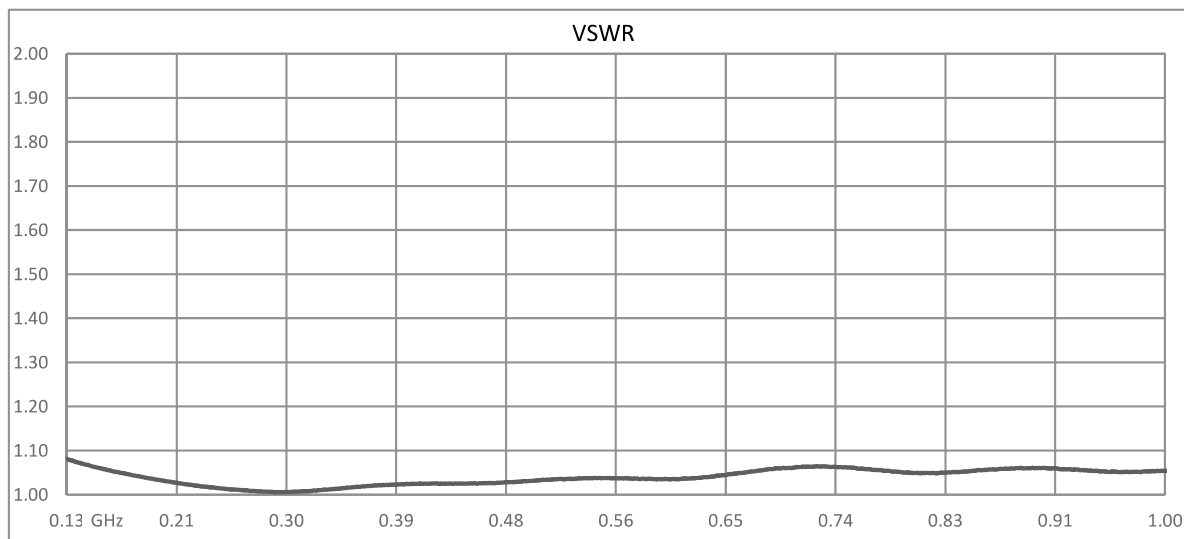
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:
Type N M/F Coaxial RF Surge Protector, 125MHz - 1GHz, DC Block, 375W, 220uJ, 50kA, Blocking Cap, Bracket Up, Hole Mount IS-50NX-C2-MA

Type N M/F Coaxial RF Surge Protector, 125MHz - 1GHz, DC Block,
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IS-50NX-C2-MA

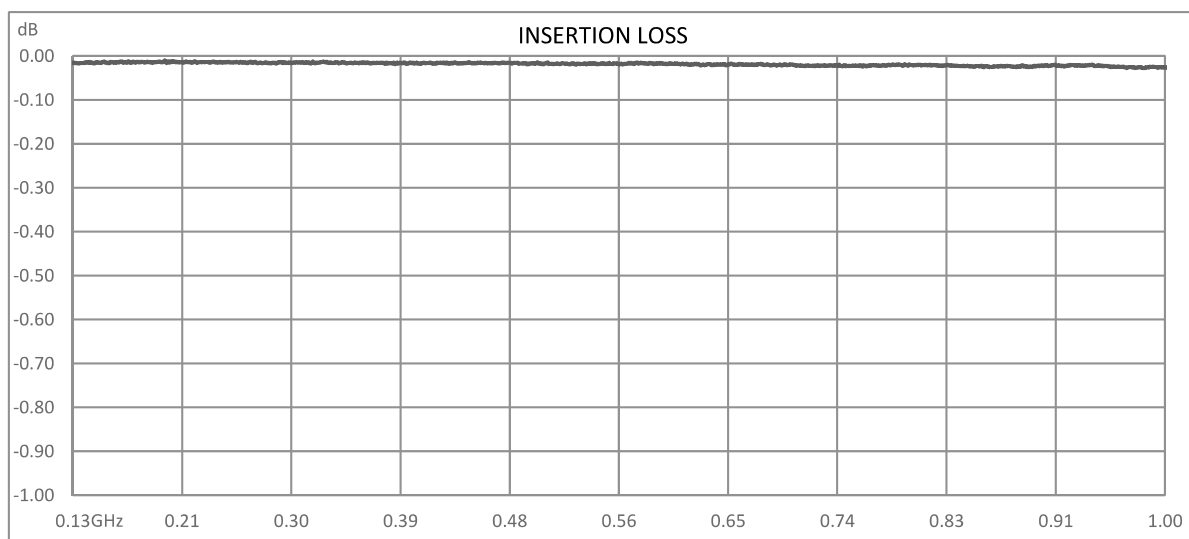
Typical Performance Data



Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:
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Type N M/F Coaxial RF Surge Protector, 125MHz - 1GHz, DC Block,
375W, 220uJ, 50kA, Blocking Cap, Bracket Up, Hole Mount

IS-50NX-C2-MA



PolyPhaser protects and increases the reliability of global RF communications networks, including transportation, telecommunications, defense, security and industrial applications, with superior RF surge protection technologies including DC Block, DC Pass and Ultra Low PIM. Backed by responsive service and expert technical support PolyPhaser continually expands its product offering and services to serve engineers' urgent needs for RF components in mission critical communication networks.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: Type N M/F Coaxial RF Surge Protector, 125MHz - 1GHz, DC Block, 375W, 220uJ, 50kA, Blocking Cap, Bracket Up, Hole Mount IS-50NX-C2-MA

URL: <https://www.polyphaser.com/type-n-surge-protector-1ghz-blocking-cap-gas-tube-is-50nx-c2-ma-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. PolyPhaser reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. PolyPhaser does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and PolyPhaser does not assume any liability arising out of the use of any part or documentation.

Type N M/F Coaxial RF Surge Protector, 125MHz - 1GHz, DC Block,
375W, 220uJ, 50kA, Blocking Cap, Bracket Up, Hole Mount

IS-50NX-C2-MA CAD Drawing

