

DPX-07xS

Diplexer | PCS / AWS | Single and Twin Units | Indoor / Outdoor

- Enables antenna and feeder sharing for PCS and AWS systems
- Offers low insertion loss with high isolation
- Field selectable DC/AISG bypass with built-in lightning protection
- Low passive intermodulation performance
- For indoor or outdoor use; wall or pole mounting

Ordering Options

When ordering replace "x" with one of the options below.

Single Unit	DPX-071S
Twin Unit	DPX-072S

Electrical Characteristics

PCS Channel

Pass Band	1850-1990 MHz
Insertion Loss	0.3 dB typical
Return Loss	24 dB typical, 18 dB min
Group Delay Variation (in any 3.84 MHz)	10ns max
Maximum Input Power	250W (average) / 3kW (PEP)
Attenuation COM to PCS 1710-1755 MHz	60 dB min
Attenuation COM to PCS 2110-2155 MHz	70 dB typical, 65 dB min

AWS Channel

Pass Band	1710-1755 MHz / 2110-2155 MHz
Insertion Loss	0.3 dB typical
Return Loss	24 dB typical, 18 dB min
Group Delay Variation (any 3.84 MHz)	10ns max
Maximum Input Power	250W (average) / 3kW (PEP)
Attenuation COM to AWS 1850-1990 MHz	70 dB typical, 65 dB min

General

Impedance	50Ω
Intermodulation (2x20W carriers)	-153 dBc max all ports

DC / AISG

A field selectable DC/AISG path is achieved via mechanical links on a IEC60130-9, 8-Pin female connector. Refer to electrical block diagram. Amphenol recommends that, due to AISG link budget reasons, a maximum of two DC/AISG paths are activated simultaneously without active repeating of the AISG signal.

Pass Band	0-3 MHz
Insertion Loss	1 dB max single DC/AISG pass
Return Loss	12 dB min single DC/AISG pass
Insertion Loss	4.5 dB typical two DC/AISG pass
Return Loss	9 dB typical two DC/AISG pass
Input Voltage Range	±31 V
DC Current Rating	2A continuous, 4A peak



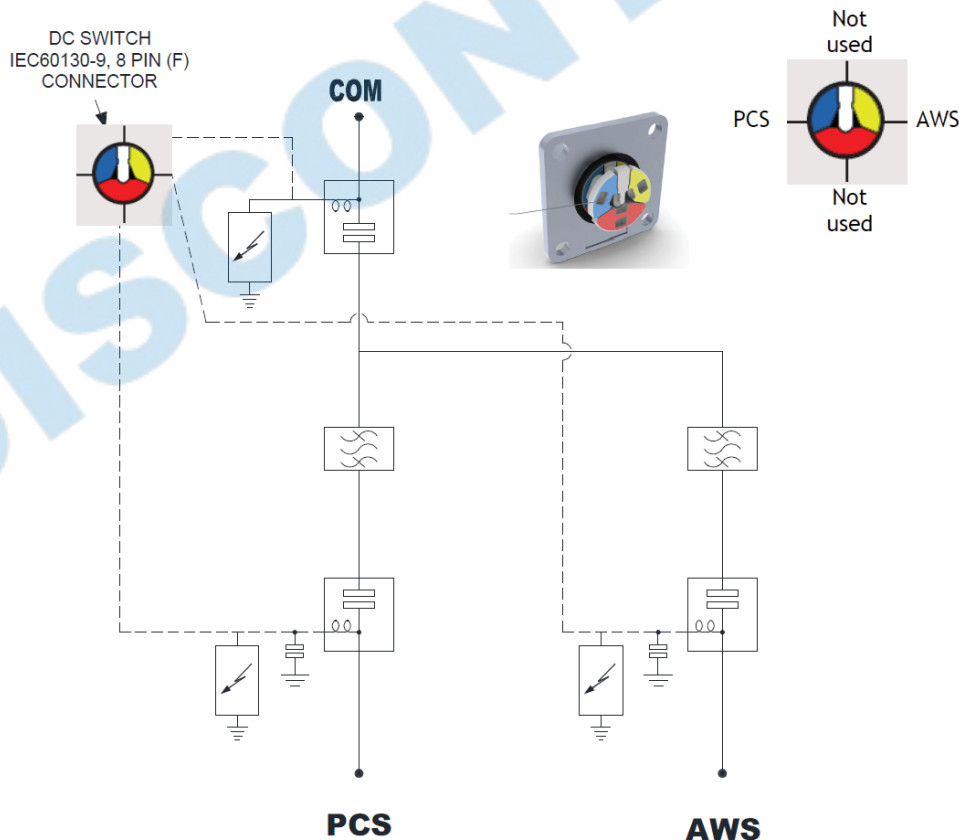
Single Unit

Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.

DPX-07xS

Diplexer | PCS / AWS | Single and Twin Units | Indoor / Outdoor

Environmental Characteristics		
Please contact Amphenol for details regarding environmental compliance.		
Temperature Range	-40° to +65° C (-40° to +149° F)	
Ingress Protection	IP67	
Lightning Protection	RF Port: ±5kA max (8/20us)	
MTBF	> 1,000,000 hours	
Compliance	EMC: EN301 489, ETSI EN 300 019 class 4.1, RoHS	
Mechanical Characteristics		
Single Unit	Dimensions (Height x Width x Depth)	203 x 158 x 55 mm / 8.0 x 6.2 x 2.2 in
	Weight	2.8 kg / 6.2 lbs
Twin Unit	Dimensions (Height x Width x Depth)	203 x 158 x 113 mm / 8.0 x 6.2 x 4.4 in
	Weight	TBD kg / TBD lbs
Finish	Painted, Light Grey (RAL7035)	
Connectors	RF: 7/16-DIN Female x 3 Long Neck	
Mounting Options	Description	Fits Pipe Diameter
Pole / Wall Bracket	Two metal clamps for pole mount included	45 - 178 mm (1.8 - 7.0 in)
Electrical Block Diagram		

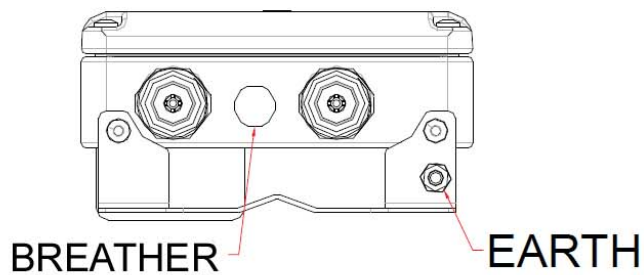
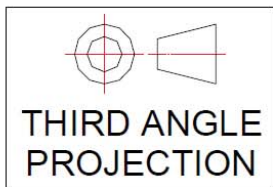
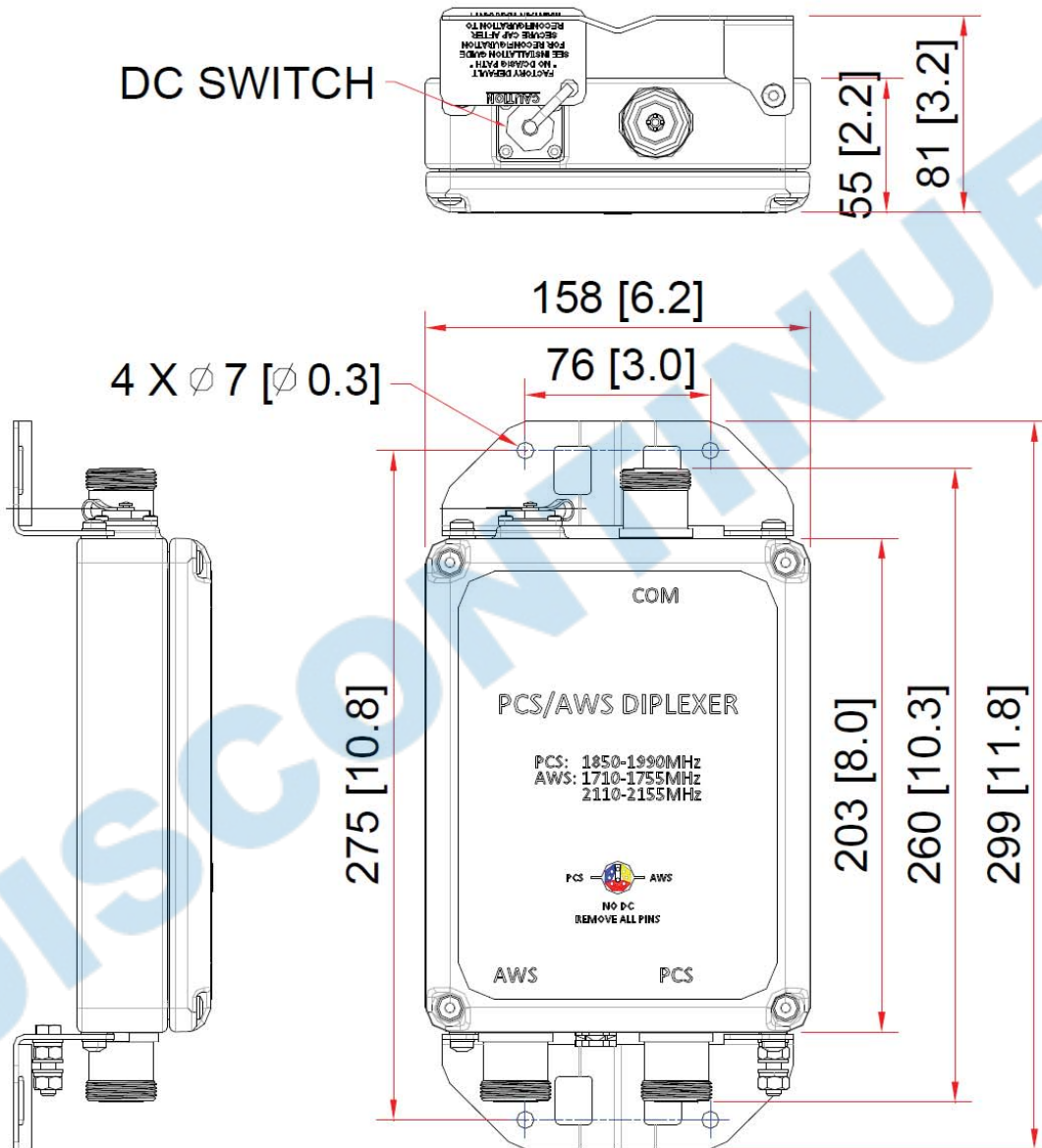


Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.

DPX-07xS

Diplexer | PCS / AWS | Single and Twin Units | Indoor / Outdoor

Mechanical Block Diagrams - Single Unit

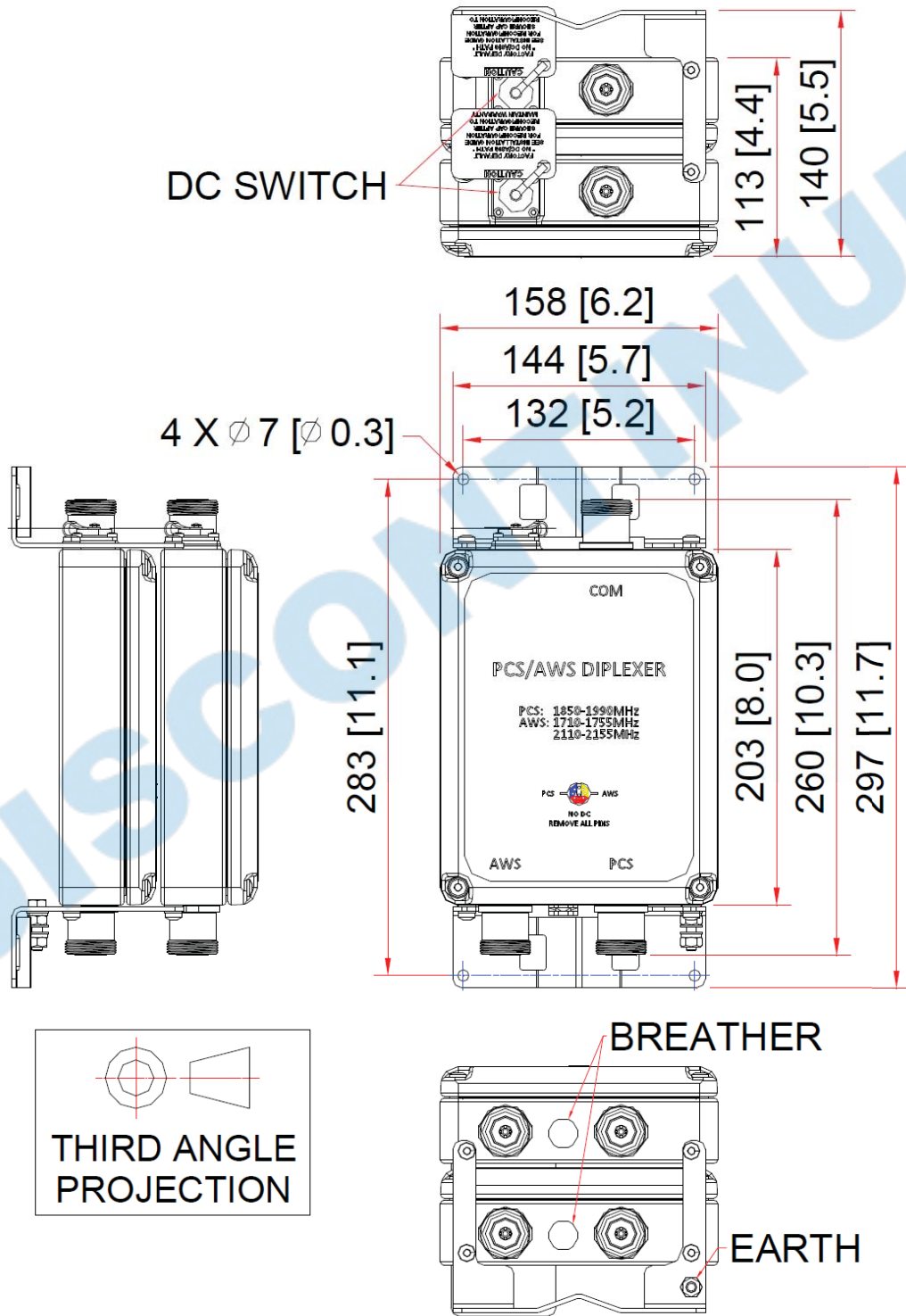


Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.

DPX-07xS

Diplexer | PCS / AWS | Single and Twin Units | Indoor / Outdoor

Mechanical Block Diagrams - Twin Unit



Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.