

PCC032-V2 PCS/AWS/AWS Crossband/In-Band Combiner Tray Assy

Features

- **Low Loss MIMO AWS A/B + F Block In-Band Combiner with Unique Patented Integrated Balanced Structure**
- **Integrated PCS + AWS Crossband Combiner**
- **Duplexed Inputs for Universal Application**
- **Low Loss (≤ 0.75 dB AWS / ≤ 0.25 dB PCS)**
- **High Channel-to-Channel Isolation (≥ 30 dB)**
- **DC/AISG Pass Through with DC Auto Sense**
- **Rackmount Configuration with x6 Combiners for 6-Feeder Consolidation (2 per sector typ.)**

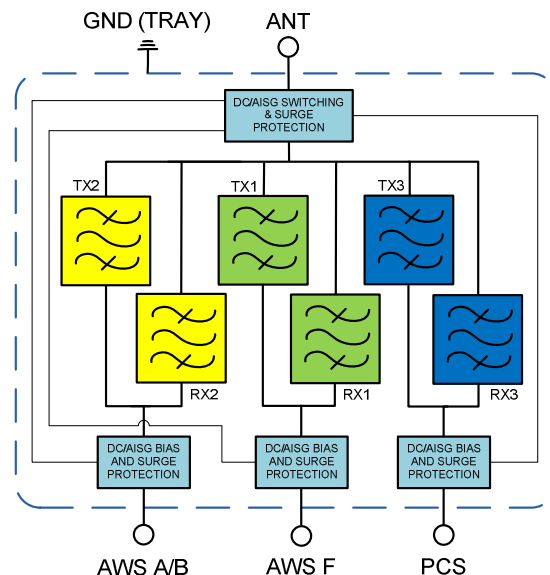


Uplink (Rx) Specifications

AWS A/B:	
Frequency Range	1710.0 - 1730.0 MHz
Insertion Loss	0.75 dB (0.60 dB avg.) max.
AWS F:	
Frequency Range	1745.0 - 1755.0 MHz
Insertion Loss	0.70 dB (0.60 dB avg.) max.
PCS:	
Frequency Range	1850 - 1910 MHz
Insertion Loss	0.25 dB max. (< 0.20 dB typ.)
Return Loss	18 dB min. (20 dB typ.)
AWS Rx-Rx/Tx Isolation	30 dB min. (32 dB typ.)
AWS - PCS Isolation	30 dB min. (32 dB typ.)

Downlink (Tx) Specifications

AWS A/B:	
Frequency Range	2110.0 - 2130.0 MHz
Insertion Loss	0.75 dB (0.60 dB avg.) max.
AWS F:	
Frequency Range	2145.0 - 2155.0 MHz
Insertion Loss	0.70 dB (0.60 dB avg.) max.
PCS:	
Frequency Range	1930 - 1990 MHz
Insertion Loss	0.25 dB max. (< 0.20 dB typ.)
Return Loss	18 dB min. (20 dB typ.)
AWS Tx-Tx/Rx Isolation	30 dB min. (32 dB typ.)
AWS - PCS Isolation	30 dB min. (32 dB typ.)
IMD in Rx Band	-117dBm max. (2x +43dBm tones)
Input Power (any port)	80W RMS, minimum 500W PEP, minimum
Power Conditions	2:1 Antenna VSWR, +50C case temp & 2500m altitude



Individual Combiner Block Diagram Shown
PCC032-V2 Contains x3 -V1, and x3 -V3
Combiners per Tray Assembly (1 ea. per sector)
with differences in DC/AISG pass through

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DC/AISG Specifications

DC/AISG Transparency	Automatic switching from any Input port to ANT Port via DC Auto Sense (AISG follows DC)
A-Path (-V1) Priority (1 ea. α , β , γ sectors)	AWS F: #1 priority AWS A/B: #2 priority PCS: #3 priority
B-Path (-V3) Priority (1 ea. α , β , γ sectors)	No DC/AISG feed through (DC on AWS-F, AWS-A/B or PCS inputs will not feed through to ANT port)
DC Transparency Power Voltage Drop @ 1A	+32V @ 2.5A max. 1V typical
Communications Band	2 to 15 MHz
Comm Band Return Loss	< 1 dB typical
Comm Band Return Loss	> 12 dB typical

Mechanical Characteristics

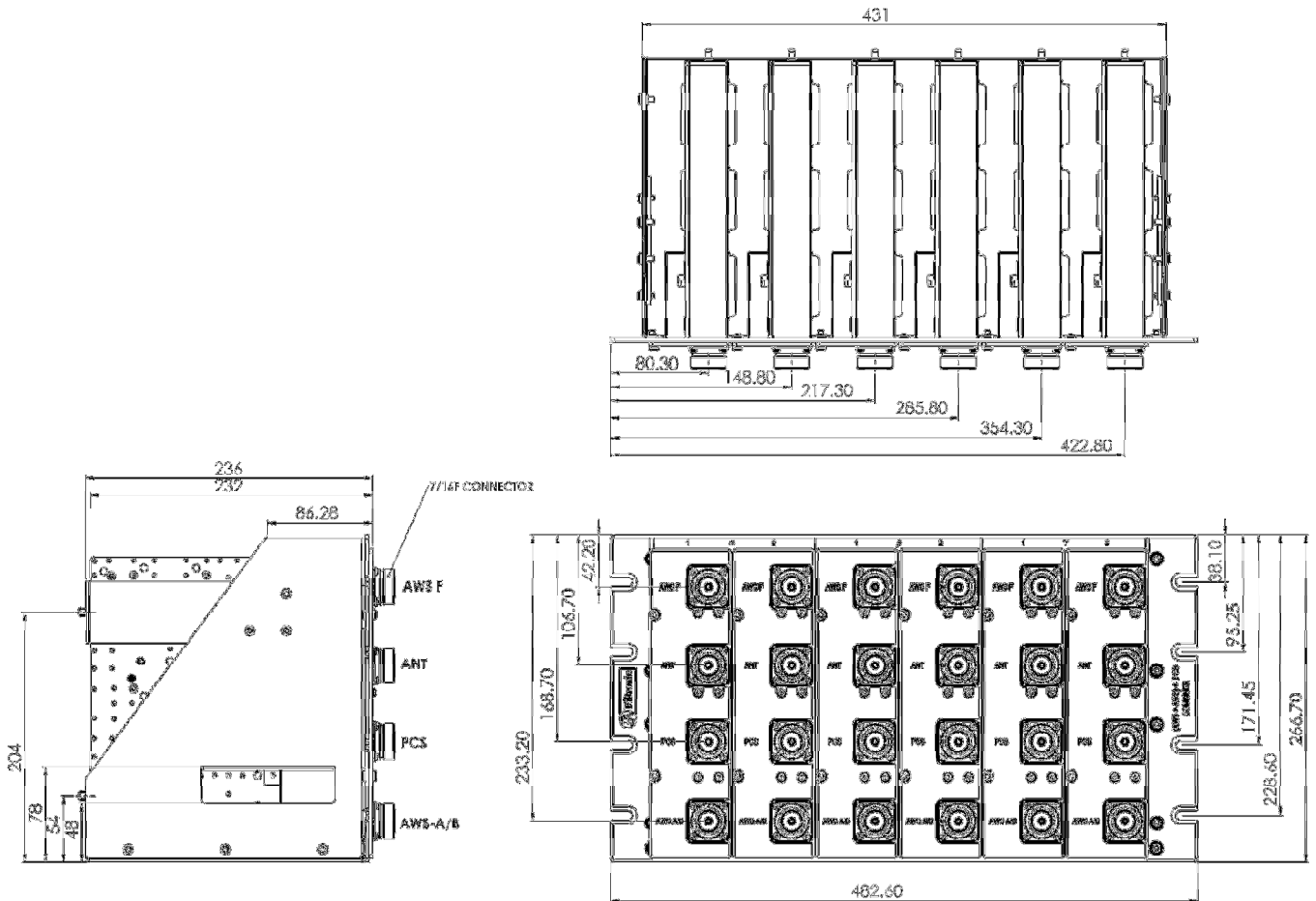
Connectors	7-16 DIN Female, Long Neck
Weight	52 lbs (23.6 kg)
Dimensions	19" Rackmount x 6U H x 9.29" (236mm) D
Mounting/Installation	Rack Tray
MTBF	> 1,000,000 Hours

Environmental Specifications

Operating Temperature	-40°C to +50°C
Altitude	2500m
Ingress Protection	IP50 (Indoor Installation)
RoHS/WEEE	Compliant
Lightning Protection	IEC 61312-1

Installation Instructions

Document No.	PIM-PCC032-V2
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