

PRODUCT
SPECIFICATION



Extremely low insertion loss and high power handling capability.

OneBase™ Crossband Coupler

Outdoor diplexer combines PCS and AWS bands

The Andrew Crossband Coupler combines signals from wireless systems operating in the PCS band with signals in the AWS band onto a common feeder cable.

These couplers use high performance bandpass filters to provide extremely low insertion loss, high isolation, and high power handling capability in a compact, rugged, weatherproof housing. Sealing gaskets provide protection from moisture ingress at all interfaces.

Provision has been made to allow TMA bias current and AISG signaling to be fed to the antenna port from the AWS port. An internal resistive load mimics a TMA being fed bias current from the PCS

port. In the event that the AWS power source fails, circuitry in the coupler connects the dc feed to the PCS port, allowing TMA bias current and AISG to be fed from that port.

These couplers feature:

- AISG compatible
- Bandpass design
- Extremely low insertion loss
- Moisture protection
- Mounting bracket and external grounding screw provided
- Power switching in the event of an AWS power source failure

SPECIFICATIONS

OneBase™ Crossband Coupler

Electrical

AWS frequency bands, MHz	1710–1755, 2110–2155
PCS frequency band, MHz	1850–1990
AWS path insertion loss, dB	0.2 maximum
PCS path insertion loss, dB	0.2 maximum
AWS path group delay, ns	12 maximum
PCS path group delay, ns	10 maximum
Return Loss, all ports, dB	20 minimum
Isolation - between paths, dB	50 minimum
Maximum power, watts	250
IMD (2 x +43 dBm), dBm	-117
Lightning protection- center conductor	10 kA, 8/20 μ s
Power supply voltage, VDC	7-30
Operating current, mA	10 \pm 5

Environmental

Operating temperature range, °C	-40 to +60
Moisture resistance	IP67
Humidity	100%

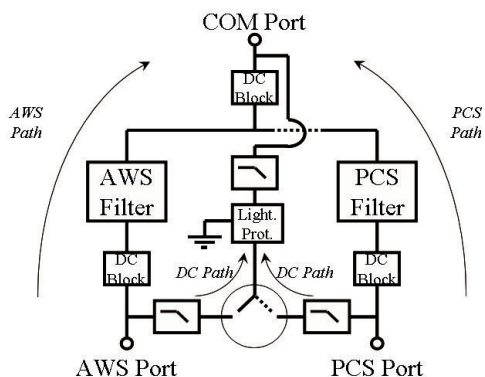
Mechanical

Dimensions, mm (in)	192 x 186 x 72 (7.6 x 7.3 x 2.8)
Weight, kg (lb)	3.6 (8) kg (lbs)
Finish	Gray paint
Connectors - long neck	7-16 DIN female
Ground screw diameter, in	1/4

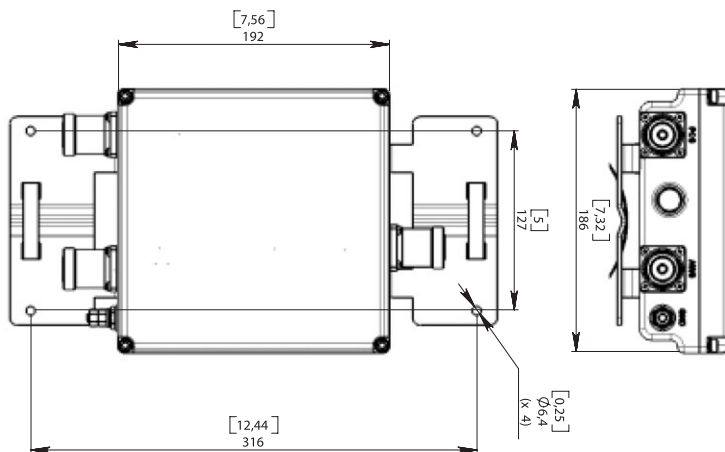
Part Number

Crossband Coupler, AWS/PCS, dc switching capability	E15S08P77
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Block Diagram



Dimensions, mm (in)



Ordering Information:

Model: ECC1920-VPUB

Description: Crossband Coupler, AWS/PCS, dc switching capability

Included Accessories: Mounting Hardware



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Bulletin PA 102180 EN (8/07)
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