

DCC Series® - Preliminary Specification

- ◆ Interface up to 2 MIMO BTS Tx/Rx or 4 SISO BTS Tx/Rx ports with simplex DAS
- ◆ Independently adjustable Tx and Rx levels
- ◆ Guaranteed Low PIM, High Isolation
- ◆ High Reliability, RoHS compliant
- ◆ Standard 2RU EIA Rack (3.5")



This DAS Carrier conditioner, KM-56N is designed to interface either four separate SISO Tx/Rx signals of the same band with similar power with a simplex DAS system, or a dual MIMO Tx/Rx signal. Each signal is split into Tx and Rx paths, allowing independent level adjustment of the Tx and Rx elements of each wireless signal.

The unit first combines the primary (Leg A) and secondary (Leg B) MIMO signals in separate hybrids. Two duplexers then separate the Tx and Rx signals of each leg.

The combined Tx signals are then attenuated by a fixed 15dB attenuator before being fed to a 0-30 dB level adjustment for optimum DAS performance. The interface is rated for input Tx powers of up to 60W/input. The DAS Rx signals are fed to a similar level adjustment, before being fed to the Rx port of the duplexers.

For MIMO operation the SISO inputs must be terminated, but when used for four SISO signals the terminations are replaced by two supplied jumper cables to combine the two DAS signals to a single SISO DAS Rx and Tx.

Similar systems for other bands available. (01/13)

Tx/Rx, MHz: 1930-1990 Tx/1850-1910 Rx

Return Loss: >15.6 dB, all ports

Tx Power/input: 40W avg max., 3 kW max pk.

Tx Path: >21 dB² attenuation plus an adjustable 30 dB in 1 dB steps.

Rx Path: 6 dB² min. attenuation plus an adjustable 30 dB in 1 dB steps.

PIM, typical: <-15.3 dBc in Rx band at input ports using two +43dBm tones

Impedance: 50Ω nominal

Environment: 0°C to +65°C, IP64

Housing: 2RU, Passivated aluminum

Connectors: N(f), Triplate

Weight,nom: 48 lbs., shelf depth 22" nom.

Notes:

In MIMO Mode: ¹>18dB Leg B ²1.4dB typ. Leg B

Specifications subject to change

| Isolation Tx/Rx (0dB all attenuators) | SISO mode | | | |
|--|-----------|-------|-------|-------|
| | P0 | P1 | P2 | P3 |
| MIMO mode | x | 50/20 | 30/30 | 50/20 |
| | open | x | 50/20 | 30/30 |
| | 30/30 | open | x | 50/20 |
| | open | 30/30 | open | x |

