

## Preliminary Data

- ◆ Interface of 4 BTS with Tx/Rx ports and Low Power Simplex DAS system
- ◆ Independently adjustable Tx and Rx levels
- ◆ Guaranteed Low PIM, High Isolation
- ◆ High Reliability, RoHS compliant
- ◆ Standard 3RU EIA Rack (5.25")



This Signal Conditioner Shelf, KM-53D is designed to interface four Tx/Rx signal blocks within the frequency band 800 - 960 MHz, with a simplex DAS system. It allows independent level adjustment of the Tx and Rx elements of a wireless signal, when the signal is already split into Tx and Rx paths.

The unit first duplexes each of the Tx/Rx inputs, of which the Tx outputs are combined using a 4:1 Hybrid Combiner. The combined Tx signal is then attenuated by a fixed 6dB attenuator before it is 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 signal is fed to a similar level adjustment, before being split into four, with 2 to the Duplexers and 2 Rx to location monitoring ports. A similar unit with N input connectors is available as the KM-53N. (08/11-1)

Frequency: Four blocks in 800 - 960 MHz  
Return Loss: >18 dB, all ports  
Tx Power: 60W average max./input  
3 kW max. peak  
Tx Path: 13 dB min. attenuation plus an adjustable 30 dB in 1 dB steps.  
Rx Path: 9 dB min. attenuation plus an adjustable 30 dB in 1 dB steps.  
Tx Isolation:  
Tx/Rx To other Tx/Rx: >65 dB  
Tx1..Tx4 To other Tx >25 dB  
Rx1..Rx4 To other Rx >20 dB  
IMD, typical: <-118 dBm in Rx band at input using two +43dBm tones  
Impedance: 50Ω nominal  
Environment: 0°C to +55°C, IP64  
Housing: Passivated aluminum  
Connectors: 7-16(f), Triplate, SMA (f) gold  
Weight: 40 lbs. nom.

