

## Preliminary Specification

- ◆ Combines bands for co-located BTS or In-building Systems
- ◆ High Input Isolation and Power
- ◆ Selectable DC/AISG Paths
- ◆ Low Passive IM., PIM
- ◆ Conforms to AISG and RoHS
- ◆ Single or Dual Wall/Mast Mounting, IP-67



Model BK-31D series is a cavity Triplexer which allows combination or separation of signals in the GSM bands 900 & 1800 and UMTS wireless bands. Attention to mechanical design, ensures low loss, low passive intermodulation and high reliability. DC by-pass/AISG configurations to either or both of the GSM-1800 and UMTS are available to order. (04/15)

DC/AISG Path Models Common (P1) path to			
Model No.	GSM-900 (P2)	GSM-1800 (P3)	UMTS (P4)
<b>BK-31D</b>	DC Path	DC Path	DC Path
<b>BK-31AD</b>	None	None	DC Path
<b>BK-31BD</b>	None	DC Path	None
<b>BK-31CD</b>	None	DC Path	DC Path
<b>BK-31DD</b>	None	None	None

Units also available with Double Wall/Pole Mounting Kit

Return Loss, all ports:	18 dB min.
AISG/DC Continuity*:	2.5A max (to AISG & 3GPP)
Environment:	IP67, -10°C to +60°C
Surge Protection:	10 kA using 8/20µs pulse
Finish: Connectors:	7-16 (f) long neck triplated
Housing:	Passivated aluminum/Paint
Weight, single, nom:	9.5 lbs., 4.3 kg with bracket

\*applicable to Models with DC/AISG path selected

MHz:	Insertion Loss/Isolation: Common (Port 1) to Pass Band			Group Delay	Power Rating	Passive Intermod. PIM
	790 - 960	1710 - 1880	1920 - 2170			
GSM-900 (Port 2)	0.1 dB typ. 0.2 max.	65 dB min.	70 dB min.	3 ns typ.	240W avg 1 kW peak	} <-145 dBc (2 x 20W)
GSM-1800 (Port 3)	65 dB min	0.2 dB typ. 0.55 dB max.	65 dB min.	25 ns typ.	240W avg 1 kW peak	
UMTS-2100 (Port 4)	65 dB min.	65 dB min.	0.2 dB typ. 0.5 dB max.	25 ns typ.	150W avg 1 kW peak	

