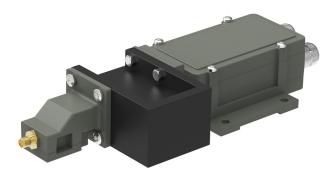
Dual PLL BDC



Dual BDC (Block Down Converter) for simultaneous Low & High Ku-Band The Dual BDC cover full Ku-Band Frequency Range simultaneously on Low and High Band Outputs.

The BDC is ideal for installation in various professional applications with Low Symbol Rate carriers.

Comes as Standard with Low Loss Isolator.





Features

- Full Ku-band coverage
- Standard Ultra Low Phase Noise meets all profiles of DVB-S2X
- High P1dB and IP3
- Standard with Low Loss Isolator
- Choose between Internal Ref. or External Ref. input models
- Compact size and light weight
- Wide operating temperature range
- Low gain option
- For outdoor use
- Option Low profile to fit 1U for indoor build-in applications

TECHNICAL SPECIFICATIONS

| MODEL: | Ku-Band Dual BDC type E | | Ku-Band Dual BDC type B | |
|--|--|-------------------------|-------------------------|-------------------------|
| Frequency Band | Low band | High band | Low band | High band |
| Input Frequency | 10.70 - 11.70 GHz | 11.70 - 12.75 GHz | 10.95 - 11.70 GHz | 11.70 - 12.75 GHz |
| LO Frequency | 9.75 GHz | 10.60 GHz | 10.00 GHz | 10.75 GHz |
| Output Frequency | 950 - 1950 MHz | 1100 - 2150 MHz | 950 - 1700 MHz | 950 - 2000 MHz |
| Spuriouses | -60 dBm typ. @ 1700 MHz | -70 dBm typ. @ 1700 MHz | -60 dBm typ. @ 1500 MHz | -70 dBm typ. @ 1500 MHz |
| Gain | By request, 10 to 60 dB in 5dB steps (Factory programmable) | | | |
| Flatness | ±0.4 dB max. within 30 MHz, ±3 dB max. over band | | | |
| Noise Figure / Noise Temperature | 2 dB / 170 K @ 60dB gain configuration typ., increasing to appr. 20 dB / 28710 K @ 0 dB gain configuration | | | |
| Phase Noise | -35 dBc @ 10 Hz -65 dBc @ 100 Hz -82 dBc @ 1 kHz -94 dBc @ 10 kHz -98 dBc @ 100 kHz -120 dBc @ ≥1MHz, typ. | | | |
| Image Rejection | 40 dB min. | | | |
| Output P1dB | +15 dBm typ. (+10 dBm @10-30 dB gain) | | | |
| Output IP3 | +25 dBm typ. (+20 dBm @10-30 dB gain) | | | |
| Output VSWR | 2.1:1 max. | | | |
| Output Connector | 2 pcs F-type 75 Ω / N-type 50 Ω / SMA-type 50 Ω | | | |
| Input Connector | SMA-type 50Ω | | | |
| Input VSWR | 1.25:1 typ. with isolator | | | |
| LO Leakage | -60 dBm @ waveguide input | | | |
| MODELS with Internal Reference | ±10 kHz -20 to +70°C (±15 kHz -40 to +80°C) | | | |
| MODELS with External 10 MHz Reference | Sine Wave, Level: -15 to +5 dBm. Supplied through the High band output connector (with no ext. 10 MHz ref. LO shifts -20 ppm | | | |
| DC Input | +15 to +26 V. supplied through any or both output connectors (Ext. 10 MHz ref. model: High band output connector) | | | |
| Current Drain | 260 mA @ +20 V 290 mA @ +18 V 320 mA @ +16 V | | | |
| Temperature Range | -40 to +80°C | | | |
| Dimensions | 224 x 94 x 46 mm (F-connector), 229 x 94 x 46 mm (N-connector), for drawing, see <u>www.smw.se</u> | | | |
| Weight | 465 g (F-connectors), 501 g (N-connectors) | | | |
| Options | Customized gain and variation, Extended low band 10.95-11.8 GHz / 10.95-12.15 GHz (type B), Low profile to fit 1U. | | | |