



8 W Ext. Ku-Band Block Up Converter

KEY FEATURES

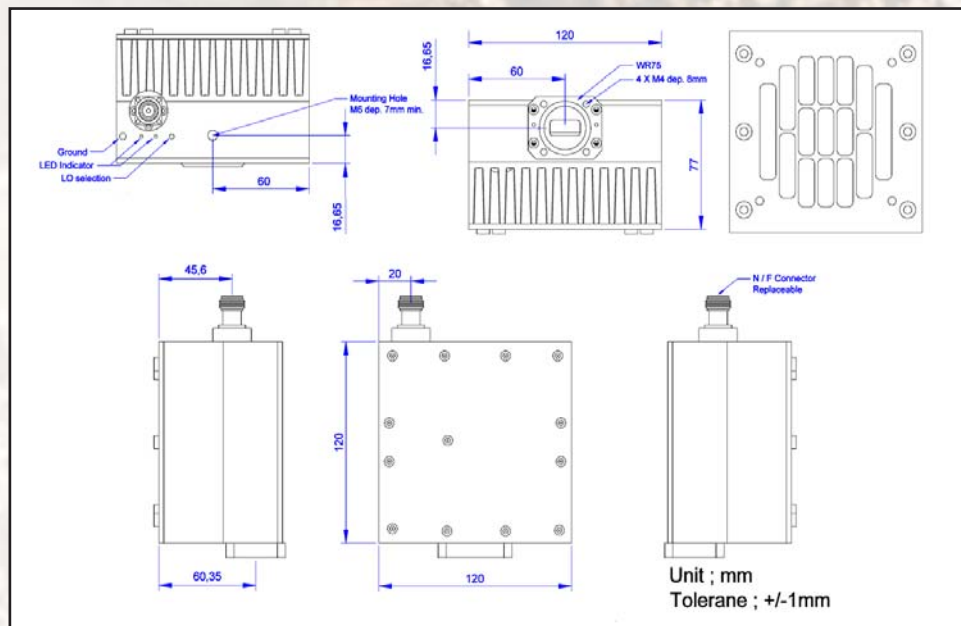
- ◆ Output frequency 13.75-14.50 GHz
- ◆ Smallest and lightest
- ◆ Double - L.O. (electronically and manually switchable 12.80 / 13.05 GHz)
- ◆ Auto-ranging 18-75 VDC
- ◆ Incomparable low power consumption (59W max)
- ◆ Digital temperature compensation
- ◆ L.O. lock and amplifier LEDs
- ◆ Field-exchangeable (F/N) IF connector
- ◆ M&C - combined RS-232/485/FSK (optional)
- ◆ Internal 10MHz high stability 10^{-8} reference (optional)
- ◆ Three-year warranty
- ◆ RoHS compliant

ABE8KFX / ABE8KFXF



This smallest and lightest 8W L-To Ku-Band Block Up Converter is designed to be mounted on the feed horn. The unit is ideal for portable and mobile applications. Double – L.O. feature makes unit universal for Ku-Band requirements. Unit is powered with 24 and 48 VDC and consumes less than 59W.

Mechanical Drawing





8 W Ext. Ku-Band Block Up Converter

| TECHNICAL SPECIFICATIONS | | |
|---|---|--|
| RF frequency | L.O. 13.05 GHz L.O. 12.80 GHz | 14.00 to 14.50 GHz 13.75 to 14.50 GHz |
| Local oscillator- switchable | | 13.05 GHz and 12.80 GHz |
| IF frequency | | 950 to 1,700 MHz |
| Output power @ P1dB min over temp. | | 8W (+39 dBm min) |
| IF connector | | N-type or F-type (field-exchangeable) |
| Power supply - auto-ranging | | +18~+75 VDC via IF cable, 59 W max |
| Internal 10MHz high stability reference | | 10 ⁻⁸ |
| Output interface | | WR-75 G |
| Gain | | 65 dB min., 68 dB nominal |
| IMD3 | | -30 dBc max |
| L.O. leakage | | -33 dBm max |
| Spurious | | -50 dBc max |
| Gain variation | over 40 MHz over 500 MHz | 1.1 dB p_p 1.4 dB p_p |
| Over operating temperature | | 1.2 dB p_p @ fixed frequency |
| Requirement for external reference | | via IF cable |
| frequency | | 10 MHz (sine-wave) |
| input power | | -5 to +5 dBm @ input port |
| Phase noise | | -55 dBc/Hz max. @ 10 Hz -65 dBc/Hz max. @ 100 Hz -75 dBc/Hz max. @ 1 KHz -85 dBc/Hz max. @ 10 KHz -95 dBc/Hz max. @ 100 KHz -120 dBc/Hz max @ 1 MHz |
| Noise figure | | 20 dB max |
| Input V.S.W.R. | | 2 : 1 max |
| Output V.S.W.R. | | 2 : 1 max. |
| Mute | | Shut off the BUC in case of L.O. unlocked |
| Input interface | ABE8KFX ABE8KFXF | 50 Ohm (N-type IF in) 75 Ohm (F-type IF in) |
| Status LED | RED GREEN YELLOW YELLOW blinking | Summary alarm All OK Standard L.O. 13.05 GHz Extended L.O. 12.80 GHz |
| Temperature range (ambient) | operating storage | -40 deg C to +55 deg C -40 deg C to +75 deg C |
| Dimensions & housing | | 120 (L) x 120 (W) x 77 (H) mm 4.72" (L) x 4.72" (W) x 3.28" (H) |
| Weight | | 1.4 kg (3.0 lbs) max |