



THREE CHANNEL Ku-BAND TRACKING DOWN CONVERTER

- **LOW PHASE NOISE**
- **FINE FREQUENCY STEP**
- **LOW INTERMODULATION DISTORSION**
- **DUAL CONVERSION**
- **BUILT-IN HIGH STABILITY INTERNAL REFERENCE**
- **HIGH RELIABILITY**
- **REMOTE / MANUAL CONTROL**

This high performance down converter is intended for use in professional applications in Ku band such as satellite earth stations. BMCD31 includes a three double conversion downconverter moduls with common low phase noise local oscillators, a microprocessor based monitor and control circuitry, a front panel with control keys and status display and own AC / DC power supply. BMCD31 can be controlled from the front panel (manual control) and via RS485/422 (remote control)

Picture:



**THREE CHANNEL Ku-BAND TRACKING
DOWN CONVERTER****Electrical characteristics:**

RF Frequency input characteristics	
No. of channels	03
Frequency	10950-12750 MHz
Input Level	-25 dBm max.
Impedance	50 Ohm
VSWR	<1.22
Connector	N Female
Intermediate output characteristics	
Frequency	70 MHz
Impedance	50 Ohm
VSWR	<1.22
Connector	N Female
Transfer characteristics	
Type	Dual conversion
Conversion sense	No inversion
Gain	37±3 dB adjustable by step of 0.1 dB
Frequency step	1 kHz
Spurious output	-65dBc typ., -60 dBc max., signal related
Image rejection	80 dB min.
Channel to channel isolation	70 dB min.
Noise figure	9dB typ., 12 dB max.
Gain flatness	0.5dB max.@ any 36MHz band.
Gain stability	± 1 dB / day @ constant temperature
Output signal level (1 dB compression)	> 17 dBm
Third order intercept point	>30 dBm
Channel to channel differential gain	± 1 dB
Phase noise	-73dBc/Hz typ., -70dBc/Hz max@ 100Hz -83dBc/Hz typ., -80dBc/Hz max@ 1kHz to 30kHz -102dBc/Hz typ., -97dBc/Hz max@ 100kHz -124dBc/Hz typ., -120dBc/Hz max@ 1MHz
Frequency stability	±0.5ppm@full temp range
Manual control	Display with functional keys in the front panel
M&C	RS 422 / RS 485 with protocol
Power line supply	230 V AC ± 10%, 50 Hz ± 6%
Physical dimension	19 inch drawer / 1U height
Operating temp.	0 ~ 50 deg C

Specifications are subject to change without notice.





BMCD31

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Outline drawing (mm):

