



## BMCU20

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### 70MHz TO S-BAND UPCONVERTER

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

This double conversion up converter is intended for use in professional applications in S band such as satellite earth stations. BMCU20 includes high performance up converter module with low noise local oscillators, microprocessor based monitor and control circuitry, a front panel with control keys and status display and own AC / DC power supply. BMCU20 can be controlled from the front panel (manual control) and via Ethernet (remote control).

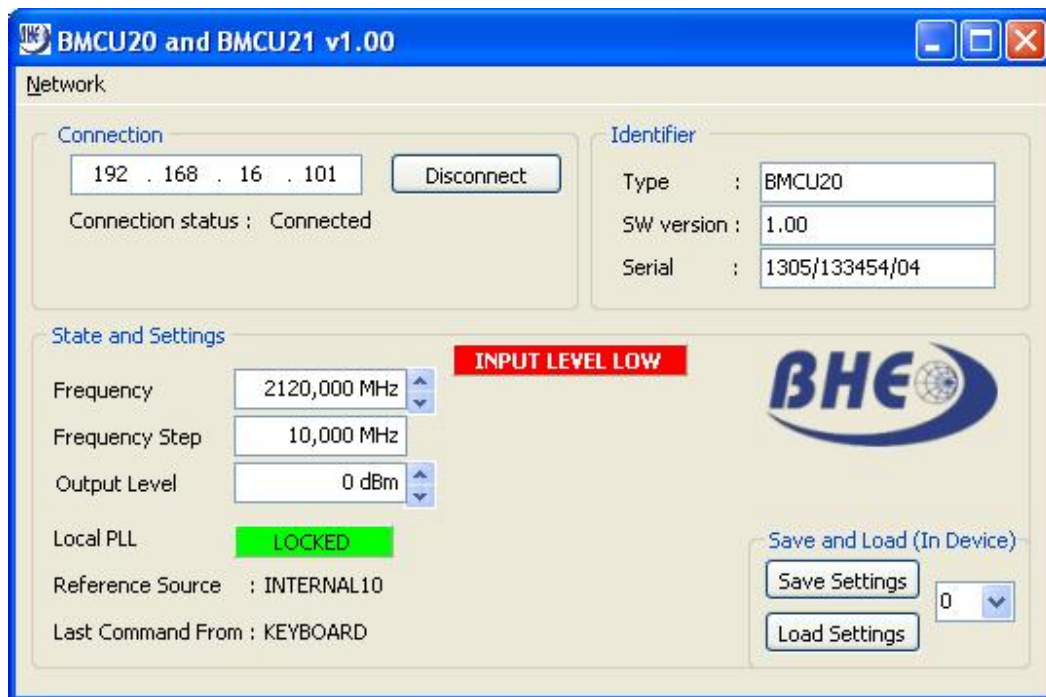


**70MHz TO S-BAND UPCONVERTER****Electrical characteristics**

Input Frequency	70 ± 4 MHz
Input Level	0 to -30 dBm
3-dB Bandwidth (for IF 70±4 MHz)	±10 MHz
Freq. Conversion	Double conversion without inversion
Output Freq. Range	2025-2120 MHz
Frequency step	1kHz
RF Output Level	-3 to +17 dBm range, adjustable in 1dB step ,+/-1dB accuracy The adjusted output level is constant in input level range (at AGC ON state)
Max. O/p at P1 dB point	+17 dBm (with 0dB attenuation)
Output Stability	typ. ±0.25 dB , max. +/-0.5dB over 8 hrs at constant temperature
Gain flatness	< 2dB in full band <1dB in any 8MHz band
Input/Output Impedance	50 ohms
I/p & O/p VSWR	1.2:1 typ., 1.4:1 max.
Noise Figure	< 10 dB at maximum gain
Phase Noise	typ. -95 dBc/Hz, max. -90 dBc/Hz @ 1 kHz typ. -101 dBc/Hz, max -96 dBc/Hz @ 10 kHz
Spurious	Signal related: <- 60 dBc in band, <- 80dBc in 2200-2300 MHz Band Signal-independent: < - 70dBm.
Image Rejection	60 dB min.
Group Delay Stability	< 5 ns over 8 hrs & 0-50 deg. C temp. range
RF/IF Connectors	N-type, Rear Panel
RF O/p Signal Monitor	-20 dBc nominal, N-type connectors on rear panel
Control and Monitor	Manually and via TCP/IP Ethernet Output Frequency, Output Level, External reference, Lock indication, Alarm, Local/Remote Selection
Ext. Ref. Signal	5 or 10 MHz, 0 ± 3 dBm, 50 ohms, Automatic change-over, BNC connector on rear panel The difference from nominal RF output frequency is always 0 Hz in case of an absolute precise external reference
Internal Reference Stability	+/-5 x 10 <sup>-8</sup> over temp, +/-1 x 10 <sup>-7</sup> / year
LO Monitor	-10dBm +/-2dB, SMA type connectors on front panel
Power Supply	230 ± 10%,V AC, 47-53 Hz, 25W max.
Operating Temp.	0-50 deg. C
Humidity	Up to 95%
Mechanical Dimension	19" Rack , 1U height

Specifications are subject to change without notice.





*Software display*