



ALB210 Series

Compact 40W
Ka-Band Block-Up Converter

This small and light weight new Ka-Band BUC is ideal for mobile and satellite uplink applications. Designed to be mounted on the feed horn, the BUC has excellent efficiency. The unit works on a wide range input AC power supply from 96V to 260V. Innovative and efficient thermal design makes this BUC one of the smallest, lightest and most reliable in the industry.

With redundancy-ready feature, the unit can be easily configured to work in 1+1

Features

- Compact and lightweight
- Excellent linearity
- Extremely reliable
- High power efficiency
- Excellent phase noise characteristics
- Low spurious
- Forward power detection function
- Remote monitor & control through RS232/RS485 and Ethernet (SNMP & HTTP)
- Integrated AC Supply
- In built 10MHz reference
- Automatic fault identification & alarm generation
- Automatic temperature compensation feature
- Redundancy ready
- Wide operating temperature range -40°C to +60°C
- RoHS compliant
- Waterproof
- LED indicator for BUC status

Quality Assurance

100% of all BUCs go through stringent quality checks in addition to well defined Electrical Stress Screening to ensure operation in harsh outdoor environments. The BUCs are also subjected to seal test for water ingress verification.

Reliability

Field proven under harsh environment conditions, Agilis ODUs can withstand temperature ranging from -40°C to +60°C with up to 100% humidity.

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Technical Specifications

RF Specifications

| | |
|---------------------------------|--|
| Transmit Frequency | 27.6GHz to 30.0GHz (Please refer to the Table 1 below for band selection) |
| Input Frequency | 950MHz to 1700MHz |
| LO frequency | Switchable (Refer Table 1) |
| Output Power @ Psat | 46dBm (40W) |
| Output @ P Linear | 43dBm |
| Small Signal Gain | 65dB (min) |
| Gain Flatness | ±2.0dB typ |
| Gain Flatness over 40MHz | ±1.0dB typ |
| Gain Variation | ±2dB over the operating temperature range |
| Spectral Re-Growth | -30dBc at P _{Linear} |
| Phase Noise @ Offset | |
| 1KHz | -73dBc/Hz min |
| 10KHz | -83dBc/Hz min |
| 100KHz | -93dBc/Hz min |
| Spurious | -60dBc typ |
| I/P VSWR | 2.0:1 typ |
| O/P VSWR | 2.0:1 typ |

Power Supply

Prime Power AC supply (96 - 260)VAC

Power Consumption

| | Plinear | Psat |
|-----|---------|------|
| 40W | 210W | 285W |

Interfaces

| | |
|---------------------------|---|
| IF Input Interface | 50Ohms N-type Female / 75Ohms F-type Female (optional) |
| Output Interface | WR28 grooved |

Reference

Internal Frequency 50 MHz

External Reference (option) 10 MHz -5dBm to +5dBm

External reference phase noise requirement @ frequency offset

| | |
|---------------|------------|
| 1KHz | -150dBc/Hz |
| 10KHz | -155dBc/Hz |
| 100KHz | -160dBc/Hz |

Table 1

| Band | RF Band (GHz) | IF Band (MHz) | LO Frequency (GHz) |
|--------|---------------|---------------|--------------------|
| Band 1 | 27.6 – 28.35 | 950 – 1700 | 26.65 |
| Band 2 | 28.35 – 29.1 | 950 – 1700 | 27.4 |
| Band 3 | 29.5 – 30.0 | 950 – 1450 | 28.55 |

Other operating bands available

www.agilissatcom.com

For more information, please send inquiry to:

sales@agilissatcom.com | marketing@agilissatcom.com | customerservice@agilissatcom.com

Monitor & Control

| | |
|----------------------|---|
| Monitor | BUC temperature LO unlocked alarm Status alarm RF Output Power detection LED indication |
| Control | 30dB adjustable gain with 0.25dB step size RF output mute |
| Interface | RS232/RS485, Ethernet (SNMP & HTTP) , |
| Tx Redundancy | Redundancy-ready (with external RCU) |

Environmental

| | |
|------------------------------|---|
| Operating Temperature | -40°C to +60°C |
| Humidity | Up to 100% Weather protection sealed to IP65 |

Mechanical

| | |
|---------------|-----------------------|
| Size | 295L x 165W x 165H mm |
| Weight | 6.8 Kg |
| Color | White Powder Coat |

