Designed to mount directly to the feedhorn, ideal for SOTM, fixed and maritime applications with option of IFL powered directly through modem via MS connector.

Innovative and excellent efficiency thermal design makes this BUC one of the most power efficient, robust and reliable to operate in harsh outdoor environment.

Easy installation with redundancy ready features to work in 1+1 redundancy mode.

Features
- Feed mountable
- Forward power detection
- Monitoring and Control through Serial and Ethernet ports
- Fault identification and alarm generation
- LED status and alarm indicator
- Auto gain control throughout operating temperature
- Auto input DC voltage ranging 38 to 60Vdc
- Wide operating temperature -40°C to +60°C
- IP65 Weatherproof
- RoHS Compliant

Quality Assurance
100% thorough stringent quality checks in addition to well-defined Electrical Stress Screening to ensure operation in harsh outdoor environment conditions. All subjected to seal test for water ingression verification.

Reliability
Field proven under harsh environment conditions. Agilis ODU can withstand temperature ranging from -40°C to +60°C under 100% humidity.
ALB130 Series
Lite 40W Ku Band
Block-Up Converter

Technical Specifications

RF Specifications

<table>
<thead>
<tr>
<th>Freq Band</th>
<th>Transmit</th>
<th>IF</th>
<th>LO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan</td>
<td>12.75 - 13.25GHz</td>
<td>950 – 1450MHz</td>
<td>11.80GHz</td>
</tr>
<tr>
<td>Standard</td>
<td>14.00 – 14.50GHz</td>
<td>950 – 1450MHz</td>
<td>13.05GHz</td>
</tr>
<tr>
<td>Extended</td>
<td>13.75 – 14.50GHz</td>
<td>950 – 1700MHz</td>
<td>12.80GHz</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output Power</th>
<th>P_{th}</th>
<th>P_{linear}</th>
</tr>
</thead>
<tbody>
<tr>
<td>40W</td>
<td>46.0dBm (40W)</td>
<td>43.0dBm (20W)</td>
</tr>
</tbody>
</table>

- Small Signal Gain: 74dB min
- Gain Flatness: ±2dB within band, ±1dB over 40MHz
- Gain Variation: ±2dB within band over operating temperature
- Intermodulation: -25dBc max @ P_{linear}
- Spurious: According to EN 301 428
- Phase Noise:
  - -93dBc/Hz max @100KHz offset
  - -83dBc/Hz max @10KHz offset
  - -73dBc/Hz max @1KHz offset
- VSWR: 1.5:1 max @input, 1.25:1 max @output with optional external isolator
- Noise Power Density:
  - Tx Band : -70dBW/4kHz max
  - Rx Band : -142dBW/4kHz max

AC/DC Power

- Prime Power: 38 to 60Vdc Auto Range
- Power Consumption: 280VA

Monitor & Control

- Monitor: BUC Temperature, Status Alarm LED Indicator, LO Unlock Alarm, RF Forward Power Detection
- Control: Gain adjustable 20dB with 0.5dB step, RF Output On/Mute
- Communication Port: Serial RS232/RS485, Ethernet (SNMP & HTTP)
- Transmit Redundancy: Redundancy-Ready (with external controller unit)

Environmental

- Operating Temperature: -40°C to +60°C
- Relative Humidity: Up to 100%
- Weatherproof: IP65

Mechanical

- Dimension (excluding interface connectors):
  - L192 x W120 x H100mm (Std/Ext)
  - L192 x W120 x H110mm (Plan)
- Weight:
  - 4.0Kg / 8.8lbs (Std/Ext)
  - 4.2Kg / 9.26lbs (Plan)

Interface

- IF Input: N-Type Female 50Q
- F-Type Female 75Q (option)
- RF Output: WR75 Square Grooved

Reference Requirement

- Frequency: 10MHz
- Power Level: -5dBm to +5dBm
- Ext Ref Phase Noise:
  - -155dBc/Hz max @100KHz offset
  - -145dBc/Hz max @10KHz offset
  - -135dBc/Hz max @1KHz offset

NOTE: All specifications subject to change without notice.
**ALB130 Series**

**Lite 40W Ku Band Block-Up Converter**

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**Standard Part List for Standalone Configuration**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PRODUCT NAME</th>
<th>OPTION</th>
<th>PART NUMBER</th>
<th>QTY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BUC</td>
<td></td>
<td></td>
<td>01</td>
<td>BUC</td>
</tr>
<tr>
<td>2</td>
<td>Cable M&amp;C</td>
<td>RS232</td>
<td></td>
<td>01</td>
<td>Cable Assembly ETH/485 14-12S to DB9 (F) 2M</td>
</tr>
<tr>
<td>3</td>
<td>Cable M&amp;C</td>
<td>ETH</td>
<td>2502041166</td>
<td>01</td>
<td>Cable Assembly ETH-DB9 to RJ45 2M</td>
</tr>
<tr>
<td>4</td>
<td>Converter</td>
<td>RS485</td>
<td>6103480008</td>
<td>01</td>
<td>Converter USB to RS485</td>
</tr>
<tr>
<td>5</td>
<td>Mounting Accessory Set</td>
<td></td>
<td></td>
<td>01</td>
<td>Mounting brackets and screws including gasket for flange WR75</td>
</tr>
</tbody>
</table>

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**Mounting Diagram**

Top View – Std Ku

Side View

Top View

---

**Option Items**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PRODUCT NAME</th>
<th>OPTION</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>WG Flexible</td>
<td>0.6m</td>
<td>4203490010</td>
<td>Flexible WG Ku band WR75 Sq Grooved to WR75 Sq Cover 0.6m</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.0m</td>
<td>4203490049</td>
<td>Flexible WG Ku band WR75 Sq Grooved to WR75 Sq Cover 1m</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.5m</td>
<td>4203490014</td>
<td>Flexible WG Ku band WR75 Sq Grooved to WR75 Sq Cover 1.5m</td>
</tr>
</tbody>
</table>

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NOTE: Part list and drawing subject to change without notice