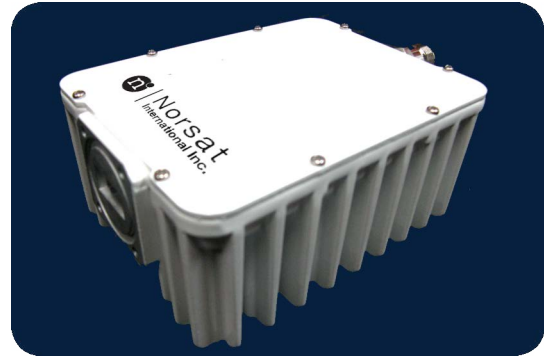




# BUC ELEMENT SERIES KU-BAND 3W BUC-ELMTKU003



## NORSAT ELEMENT SERIES BUCS

Norsat Satellite Communication solutions are renowned for their high quality, reliability, and innovation. The Ku ELEMENT series offers small size and weight with a variety of frequency options that make it ideal for VSAT applications.

Stock units are available in standard and extended Ku-Band frequencies. Special order units are available in a wide variety of additional frequencies from 10.38 – 10.55GHz up to 17.7 -18.1 GHz.

## FREQUENCY BANDS

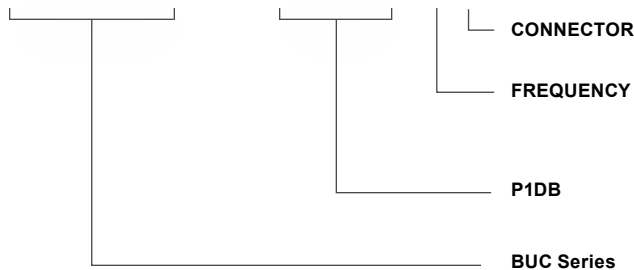
|                               |                 |                  |
|-------------------------------|-----------------|------------------|
| <b>Model</b>                  | BUC-ELMTKU003-S | BUC-ELMTKU003-E  |
| <b>Output frequency (MHz)</b> | 14.0 – 14.5 GHz | 13.75 – 14.5 GHz |
| <b>L.O. frequency (GHz)</b>   | 13.05 GHz       | 12.80 GHz        |
| <b>Input frequency (GHz)</b>  | 950 – 1450 MHz  | 950 – 1700 MHz   |

## KEY FEATURES

- Small size, ideal for feed mounting
- 18 frequency options available
- RoHS Compliant

## HOW TO ORDER

# BUC-ELMTKU003-EF



**CONNECTOR**  
F - 75 Ohm  
N - 50 Ohm

**FREQUENCY**  
S - Standard  
E - Extended

*\*Call for additional options.*



# KU-BAND 3W BUC-ELMTKU003

## RF SPECIFICATIONS

|  |  |
|--|--|
| <b>Output Power (P1db)</b>   | 34 dBm min   |
| <b>External Reference</b>  | 10MHz  |
| <b>Reference Power Level</b>   | -5 dBm to +5dBm  |
| <b>Phase Noise (SSB)</b>   | -65 dBc/Hz at 100Hz<br>-75 dBc/Hz at 1kHz<br>-85 dBc/Hz at 10kHz<br>-95 dBc/Hz at 100KHz |
| <b>Linear gain</b>   | 55 dB  |
| <b>Gain flatness</b>   | +/- 4.0 dB p-p, max over full band<br>+/- 1.5dB p-p over 54MHz                           |
| <b>Gain variation over temperature</b>   | -4.0 dB p-p over operating range   |
| <b>Gain variation over 24hrs</b>   | +/- 0.5 dB max at constant temp  |
| <b>Intermodulation</b><br>with 2 equal carriers at 3dB total<br>power backoff from rated power                           | -25 dBc @ Plinear  |
| <b>Spectral Regrowth (typical)</b><br>at 2db below rated output power<br>at 1.0x symbol rate offset for<br>OQPSK or QPSK | -26 dBc  |
| <b>AM/PM Conversation</b><br>(up to 2 dB below rated Output Power)   | 2 deg/dB   |
| <b>Max Input Power without damage</b>  | 13 dBm   |
| <b>Output Spurious -In Band</b>  | -60 dBc  |
| <b>-Out Band</b>   | -50 dBc  |
| <b>Noise power density</b>   | -90 dBm/Hz in Tx<br>-156 dBm/Hz in Rx  |

## INTERFACES

|                         |                  |
|-------------------------|------------------|
| <b>Input VSWR</b>       | 2.0 : 1          |
| <b>Output VSWR</b>      | 2.0 : 1          |
| <b>Input Connector</b>  | N: 50 Ω, F: 75 Ω |
| <b>Output Connector</b> | WR-75            |

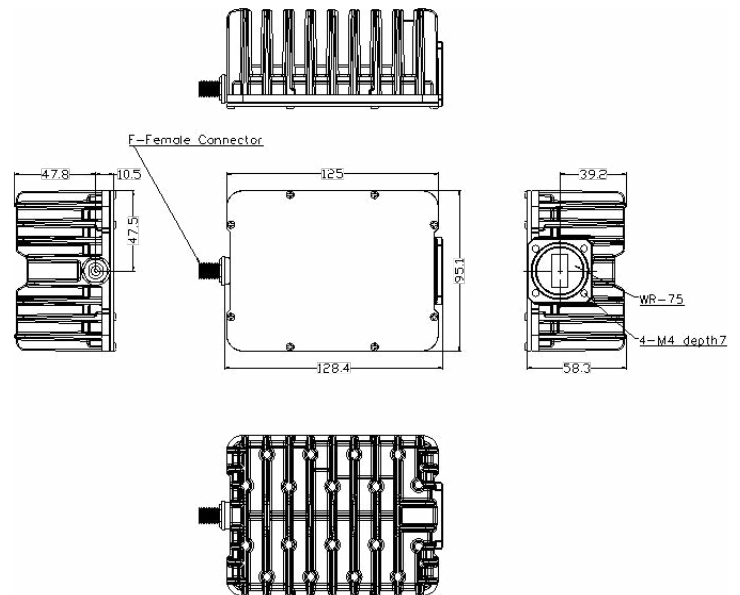
## ENVIRONMENTAL & PHYSICAL

|                                  |                                |
|----------------------------------|--------------------------------|
| <b>Temperature (operational)</b> | -40 C to +55 C                 |
| <b>Humidity (operational)</b>    | 0 – 100% condensing            |
| <b>Dimensions (L x W x H)</b>    | 129 x 95 x 58 mm               |
| <b>Weight</b>                    | 700g                           |
| <b>Enclosed Accessories</b>      | O-Ring (1 pc)<br>Screws (4 pc) |

## POWER

|                           |                         |
|---------------------------|-------------------------|
| <b>Power requirements</b> | +15 to +24 VDC over IFL |
| <b>Power Consumption</b>  | 20W max                 |

## MECHANICAL DIAGRAM



Request A Quote