Amplus Communication has been serving the global VSAT industry, being continuously managed by the Most Experienced Personnel in Design, Engineering and Manufacturing of VSAT equipment in the Southeast Asia region.

AM-9448 Series Ku-Band Transceiver

10W, 25W, 40W

World’s Most Simplified Transceiver Technology
All-In-One Package - Reliable Redundancy for Crucial VSAT Networks

Features
• Single Housing Unit
• Impressive Gain & Gain Flatness
• Weather Protection IP65 Standard
• High Frequency Stability
• Very Low Power Consumption
• Monitor & Control through RS232/485
• IF 70/140 ± 18 MHz Transmit & Receive (Software Selectable)

Benefits
• Light Weight
• Low Phase Noise
• TCP/IP M&C Interface
• Internal Reference
• Tricolour LED Status Indicator
• Extremely Easy to Install & Operate

Frequency Range (GHz)

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<th>Transmit</th>
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<td>Std Ku</td>
<td>14.00 ~ 14.50</td>
<td>LNB 10.95 ~ 11.70</td>
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<tr>
<td>Ext Ku</td>
<td>13.75 ~ 14.50</td>
<td>LNB 11.70 ~ 12.20</td>
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<tr>
<td>LNB</td>
<td>12.20 ~ 12.70</td>
<td>LNB 12.25 ~ 12.75</td>
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Beneficial Features (Optional)
• 110VAC
• 48VDC
• IF 140 ± 27/36 MHz
• Handheld Terminal for M&C
• FSK M&C Interface
• Installation by Expert Engineer
• Annual Maintenance Service

Cert No. E08093
ISO 9001
ISO 14001
OHSAS 18001
# AM-9448 Series Ku-Band Transceiver

## Technical Details

### Transmit Specifications
- **RF Output Frequency**: As per the frequency table on front page
- **IF Input Frequency**: 70/140 ± 18 MHz (software selectable)
- **Input Interface**: N-type
- **Output Interface**: CPR-75G
- **Output Power**: 10W (40), 25W (44), 40W (46) dBm
- **Gain**: 66 dB, 70 dB, 70 dB nominal
- **Gain Adjustment**: 25 dB @ 0.5 dB steps
- **IF Input VSWR**: 1.2 : 1 max
- **RF Output VSWR**: 1.3 : 1 max

### Receive Specifications (Excludes LNB)
- **L-BD Input Frequency**: 950 to 1750MHz
- **RF Output Frequency**: 70/140 ± 18 MHz (software selectable)
- **Input / Output Interface**: N-type
- **Gain**: 30 dB typical
- **Gain Adjustment**: 25 dB @ 0.5 dB steps
- **RF Input VSWR**: 1.3 : 1 max
- **IF Output VSWR**: 1.2 : 1 max

### Common Specifications
- **Phase Noise**:
  - 100 Hz: -63 dBC/Hz max
  - 1 KHz: -73 dBC/Hz max
  - 10 KHz: -83 dBC/Hz max
  - 100 KHz: -93 dBC/Hz max
- **Frequency Step Size**: 1 MHz
- **Frequency Stability**: ± 0.02 ppm (-40°C to +60°C)
- **Frequency Aging**: ± 1 ppb/day
- **Gain Flatness (over RF BW)**
- **Gain Stability**: ± 2.0 dB max (-40°C to +60°C)
- **Intermodulation Product**: -25 dBc typical @ 3 dB OPBO
- **Spurious**: -55 dBc max

### Operating Power Requirement
- **Operating Voltage**: 230V AC (110VAC, 48VDC optional)
- **Power Consumption (Watts)**: 135 (10W), 250 (25W), 450 (40W) max

### LED Status
- **Green**: Normal
- **Red**: Fault
- **Blue**: PA Off

### Receive Specifications (LNB)
- **LNB Frequency Options**: As per the frequency table on front page
- **Input Interface**: CPR-75G
- **Output Interface**: N-type (F-type optional)
- **Output Frequency**: 950 to 1750MHz
- **Noise Temperature**: 75K typ. @ 25°C
- **Gain**: 60dB typ.
- **Gain Flatness**: ±2.0dB
- **RF Input VSWR**: 2.5 : 1 max

### Monitor and Control
- **Monitor**
  - Channel / Gain setting
  - RF input power reading
  - SSPA status
- **Control**
  - Channel selection
  - SSPA On / Off
  - Gain adjustment
  - LNB DC Supply On / Off
  - Int / Ext Ref for LNB (software selectable)
  - LNB current threshold setting
  - Spectrum configuration
- **Redundancy**: External redundancy controller required

### Environmental
- **Temperature**: -40°C to +55°C
- **Humidity**: 0 to 100%

### Mechanical
- **Dimensions**:
  - Transceiver (10 - 25w): 238L x 327W x 197H mm / 9.4L x 12.9W x 7.8H in
  - LNB: 127L x 80W x 40H mm / 5L x 3.14W x 1.57H in
- **Weight**:
  - Transceiver (10 - 25w): 15 kg / 33 lb
  - LNB: 0.4 kg / 0.9 lb

*All specifications & designs are subject to changes without notice

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