



## Broadband Solutions

760149443 | BOS-TX-05-3731-LSANA-SC

**Optical Transmitter, 5 dBm output per wavelength, ITU 37–31, standard SBS, AGC, ac powering, SC/APC connectors, four optical outputs**

## Optical Specifications

|   |  |
|---|--|
| ITU Channels                                  | 31   33   35   37  |
| Output Ports, quantity                        | 4  |
| SBS Threshold                                 | 14 dBm into 45 km  |
| Distortion Performance (CNR), minimum         | 47 dB  |
| Distortion Performance (CSO), maximum         | 60 -dBc (relative to carrier)  |
| Distortion Performance (CTB), maximum         | 63 -dBc (relative to carrier)  |
| Distortion Performance Note (CNR)             | With 77 NTSC channels plus 75 QAM, up to 40 km of fiber   -5 dBm received power into analog receiver with noise current density <5pA/sqrt(Hz), with EDFA |
| Distortion Performance Note (CSO)             | With 77 NTSC channels plus 75 QAM, up to 40 km of fiber   -5 dBm received power into analog receiver with noise current density <5pA/sqrt(Hz), with EDFA |
| Distortion Performance Note (CTB)             | With 77 NTSC channels plus 75 QAM, up to 40 km of fiber   -5 dBm received power into analog receiver with noise current density <5pA/sqrt(Hz), with EDFA |
| Output Power per Wavelength                   | 5 dBm  |
| Power Variation Between Wavelengths, maximum  | ±0.5 dB  |
| Wavelength on ITU Channels at 100 GHz Spacing | 1547.72 nm (ITU 37)   1549.32 nm (ITU 35)   1550.92 nm (ITU 33)   1552.52 nm (ITU 31)  |

## Rf Specifications

|  |  |
|--|--|
| Flatness at Frequency Band, typical (Peak to Valley) | 0.8 dB @ 50–550 MHz   1.2 dB @ 50–1002 MHz |
| Input Level at Broadcast Port, AGC mode              | 18 dBmV                                    |
| Input Level at Broadcast Port, MGC mode              | 15 dBmV                                    |
| Input Level at Narrowcast Port, AGC mode             | 18 dBmV                                    |
| Input Level at Narrowcast Port, MGC mode             | 15 dBmV                                    |
| Input Return Loss, typical                           | 16 dB                                      |
| Operating Frequency Band                             | 50–1002 MHz                                |
| Set-point Offset Range, nominal, AGC mode            | ±2.0 dB                                    |
| Test Point Flatness, typical                         | ±0.8 dB                                    |
| Test Point Level (Analog), typical                   | -2.0 dBmV                                  |

## Electrical Specifications

|                            |                                |
|----------------------------|--------------------------------|
| Voltage Range              | 85–240 Vac                     |
| Electrical Safety Standard | c-UL-us   CE   US FCC Part 15A |
| Power Consumption, maximum | 80.0 W                         |

## Environmental Specifications

|                       |                                    |
|-----------------------|------------------------------------|
| Operating Temperature | 0 °C to +50 °C (+32 °F to +122 °F) |
|-----------------------|------------------------------------|

## Mechanical Specifications

|                               |               |
|-------------------------------|---------------|
| Communications Port Interface | RJ45          |
| Optical Port Interface        | SC/APC Female |
| RF Port Impedance             | 75 ohm        |
| RF Port Interface             | F Female      |
| Serial Port                   | RS-232        |

## General Specifications

|            |           |
|------------|-----------|
| Brand      | BOS®      |
| Rack Type  | EIA 19 in |
| Rack Units | 1         |
| Warranty   | One year  |

## Dimensions

|            |                      |
|------------|----------------------|
| Depth      | 431.80 mm   17.00 in |
| Height     | 44.45 mm   1.75 in   |
| Net Weight | 8.16 kg   18.00 lb   |
| Width      | 482.60 mm   19.00 in |

## Regulatory Compliance/Certifications

| Agency        | Classification   |
|---------------|--|
| ISO 9001:2008 | Designed, manufactured and/or distributed under this quality management system |

## \* Footnotes

|  |  |
|--|--|
| Distortion Performance (CNR), minimum    | CNR—Composite Carrier to Noise Ratio   |
| Distortion Performance (CSO), maximum    | CSO—Composite Second Order   |
| Distortion Performance (CTB), maximum    | CTB—Composite Triple Beat  |
| Distortion Performance Note (CNR)        | CNR—Composite Carrier to Noise Ratio   |
| Distortion Performance Note (CSO)        | CSO—Composite Second Order   |
| Distortion Performance Note (CTB)        | CTB—Composite Triple Beat  |
| Input Level at Broadcast Port, AGC mode  | AGC—Automatic Gain Control; 80 analog channels +73 QAM at 6 dB below analog channels |
| Input Level at Broadcast Port, MGC mode  | MGC—Manual Gain Control; 80 analog channels +73 QAM at 6 dB below analog channels    |
| Input Level at Narrowcast Port, AGC mode | AGC—Automatic Gain Control; QAM 6 dB below analog channels                           |
| Input Level at Narrowcast Port, MGC mode | MGC—Manual Gain Control; QAM 6 dB below analog channels                              |
| SBS Threshold                            | SBS—Stimulated Brillouin Scattering  |