Ka-Band Redundant TLNB System

Redundant LNB systems minimize system downtime due to LNB failure by providing a spare LNB and an automatic means of switching to the spare upon failure of the primary LNB. The system consists of an outdoor plate assembly which mounts at the antenna hub and an indoor control panel.

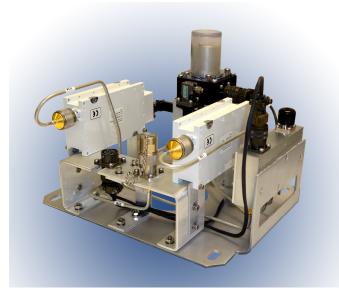
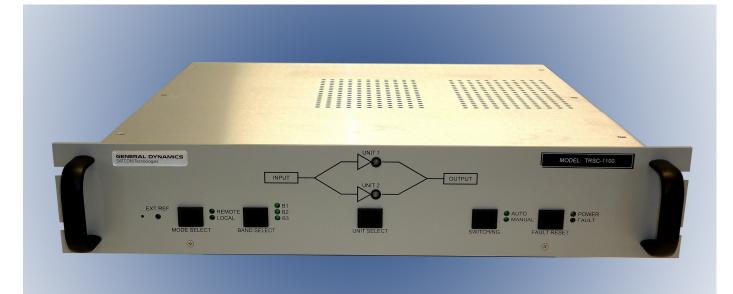


Plate Assembly Features

- TLNB20000X LNBs
- High quality dual waveguide/coaxial switch
- Manual override
- Waveguide input flange

Control Panel Features

- Standard 19" rack panel, 31/2 " high
- Dual, redundant power supplies
- Worldwide universal AC input capability
- Manual or automatic operation
- Monitors LNB bias currents to detect faults
- Network interface







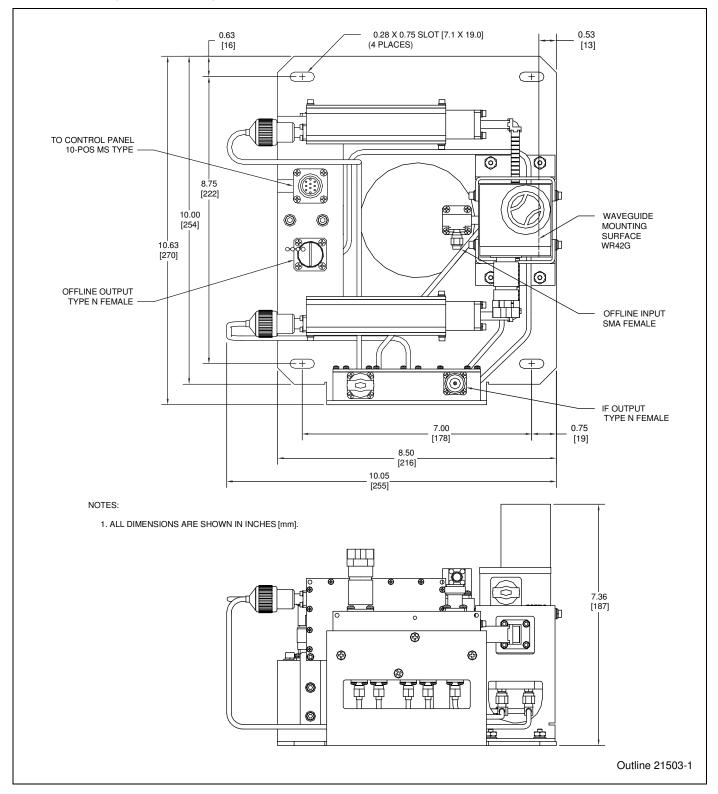
Specifications

TBRKA-1100 System

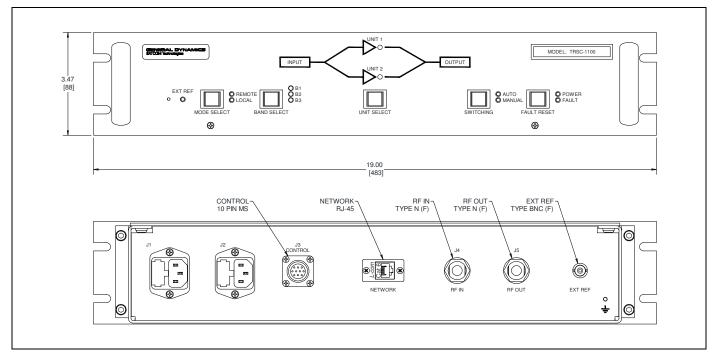
Parameter	Notes	Min.	Nom./Typ. [†]	Max.	Units
Input Frequency		20.20		21.20	GHz
Output Frequency		1000		2000	MHz
Output Spectrum			Non-Inverted		
Local Oscillator Frequency			19.20		GHz
External Reference	0 to +10 dBm @ IF Output		10.0		MHz
LO Phase Noise	10 Hz 100 Hz 1 kHz 10 kHz 100 kHz 1 MHz			-32 -62 -72 -82 -92 -102	dBc/Hz dBc/Hz dBc/Hz dBc/Hz dBc/Hz dBc/Hz
Spurious	Signal related, IF band Non-signal-related, IF band			-60 -70	dBc dBm
Gain (Nominal)		54	56		dB
Gain Flatness	Full band Per 40 MHz			±2.0 ±0.50	dB dB
Gain Stability	Per week, constant temp. Vs. temperature		±1.5	±0.50	dB dB
Power Output	At 1 dB compression	+12	+14		dBm
3rd Order Output Intercept	0 dBm tones, 5 MHz spacing	+22	+24		dBm
Maximum Input Power	Without damage			0	dBm
Noise Temperature	At +23 ℃		125	135	К
VSWR	Input (50 ohms) Output (50 ohms)		1.35 1.80	1.50 2.00	:1 :1
Connectors	RF Input IF Output Offline In Offline Out Control		WR42 Waveguide Flange Type N Female Type SMA Female Type N Female MS3110E1210S		
Temperature Range	Operating, Ambient	-40		+70	°C

When there is only one value on a line, the Nom./Typ. column is a nominal value; otherwise it is a typical value. Typical values are intended to illustrate typical performance, but are not guaranteed.

1:1 Plate Assembly Outline Drawing



TRSC-1100 Controller, Front and Rear Panels



Specifications

TRSC-1100 Controller

LNB Status Monitor Method	Control panel monitors LNB bias current. Alarm is generated if current goes outside of allowed tolerance window.		
Switchover Time	100 ms		
M&C Interface Interface Connector	SNMP v1.0 RJ-45		
Controller Dimensions; Weight	19" (483 mm) W x 3.47" (88.1 mm) H x 16.0" (406 mm) D; 25 lb (11.4 kg)		
Cable Length to Plate Assy	Order cable separately. For 50 or 100 ft (15 or 30 m), order ACAB-21486-50 or -100 For 150 to 300 ft (45 to 90 m) order ACAB-23156-150, -200, -250, or -300 (50 ft increments available). Maximum cable length is 300 ft (90 m).		
AC Input	87-265 Vac, 47-63 Hz, 100 W. Dual AC inputs and dual redundant power supplies.		
Operating Temp. Range	0 to +50 °C		

Other Products

- Solid-State Power Amplifiers and SSPA Systems
- Solid-State Power BUCs and SSPB Systems
- Low Noise Amplifiers and LNA Systems
- Low Noise Block Converters and LNB Systems
- · Block Up and Block Down Converters
- Synthesized Converters
- Line Drive Amplifiers
- Power Supply Monitors
- Redundant Control Panels for SSPAs, SSPBs, and LNAs

GENERAL DYNAMICS

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