



HIGH-VALUE TEST TRANSLATORS

FOR SATELLITE COMMUNICATIONS



Model Number	RF Input (GHz)	RF Output (GHz)	LO Frequency (GHz)
DNS-14-12-LC	14.0 – 14.5	11.7 – 12.2	2.3
DNS-14-1.2-LC	14.0 – 14.5	0.95 – 1.45	13.05
DNS-14.1-1.35-LC	13.75 – 14.5	0.95 – 1.70	12.8
DNS-6-4-LC	5.845 – 6.425	3.62 – 4.2	2.225
DNS-6-1.2-LC	5.925 – 6.425	0.95 – 1.45	4.975
DNS-6-1.2-INV-LC	5.925 – 6.425	0.95 – 1.45	7.375

FEATURES

- Minimum amplitude and delay distortion
- 30 dB level control

OPTIONS

- 1A. 30 dB additional level control. Attenuator located at input.
7. Summary alarm. Contact closure for DC power and/or local oscillator fault.

Note: Missing option numbers are not applicable for these systems.

This equipment is designed for applications where frequency translation is needed with a minimum of amplitude and delay distortions.

GENERAL SPECIFICATIONS

FUNCTIONAL

Conversion loss.....	25 dB maximum
Amplitude response.....	± 0.25 dB over any 40 MHz, ± 1 dB over output frequency band
Input return loss.....	18 dB minimum/50 ohms
Output return loss.....	18 dB minimum/50 ohms
Frequency stability	$\pm 3 \times 10^{-6}$ /day (0 to 50°C)
Level control	30 dB. Attenuator located at input
Intermodulation distortion	With two inband signals at -5 dBm, third order intermodulation products are less than 50 dBc
Input/output isolation	60 dB minimum

PRIMARY POWER REQUIREMENTS

Voltage	100, 120, 220, 230/240 VAC +10%, -13% (rear panel selectable), 250 VAC maximum
Frequency	47-63 Hz
Power consumption.....	150 W typical

PHYSICAL

Weight	20 pounds nominal
Overall dimensions.....	19" x 1.75" panel height x 20" maximum
Connectors (rear panel)	
RF.....	N female
Summary alarm (Option 7)	DE-9P
Test points (front panel)	
DC voltage.....	Jack
LO phase voltage	Jack
LO frequency/power monitor	SMA female

ENVIRONMENTAL

Operating	
Ambient temperature.....	0 to 50°C
Relative humidity	Up to 95% at 30°C
Atmospheric pressure	Up to 10,000 feet
Nonoperating	
Ambient temperature.....	-50 to +70°C
Relative humidity	Up to 95% at 40°C
Atmospheric pressure	Up to 40,000 feet
Shock and vibration.....	Normal handling by commercial carriers

**TYPICAL
PHASE NOISE CHARACTERISTICS
(1.0 Hz BANDWIDTH)**

