

5-Channel Amplifier and DC Injector

20 – 3000 MHz

Product Code: MISC-A0045

VERSION: 3.4



SPECIFICATIONS:

Electrical:	
Frequency range	20 – 3000 MHz
Gain	10 ±2 dB
Input VSWR	< 2:1
Output VSWR	< 2:1 with matched inputs < 4:1 for all input impedances
Nominal input impedance	50 Ω
Input connectors **	5 x N-type female
Output connectors **	5 x N-type female
Thru connectors **	4 x N-type female
Maximum input power	20 dBm
IP3	> 33 dBm
Noise figure	< 6 dB
Power/control connectors **	Deutsch MS 3474 W18-32 PN
Supply voltage	24 ± 4 V DC
Current consumption	< 800 mA
Maximum output current	300 mA
Overvoltage protection	60 V for 100 ms
Number of DC outputs **	1
Mechanical:	
Dimensions (excl. connectors)	240 mm x 200 mm x 120 mm
Mass	3.5 kg
Colour **	Desert sand matt 31-1774 exterior
Mounting method	Four holes tapped M12 on a 180 mm square pattern
Environmental: designed to meet the following specifications	
Temperature (operational)	-30 °C to +70 °C
Relative humidity (operational)	< 95 %
Salt fog	Yes
Vibration	MIL-STD-810F vehicle
Shock	20 G
Operational rain proof	Yes
Water and dust resistance	IP 66

PRODUCT OVERVIEW:

This amplifier unit is designed to overcome the losses associated with long cable runs from antennas to the ground.

Ideal for a stack of monitoring or DF antennas, this unit features five low-noise amplifiers in a single housing, and can be ordered with DC injection on one or more ports.

The MISC-A0045 provides a termination for DF control and RF cables. Four additional N-type female connectors allow passive interconnection of two RF cables. Two 32-way connectors, wired pin-to-pin, allow through connection of a control cable. This also powers the amplifiers in the unit.

PRODUCT FEATURES:

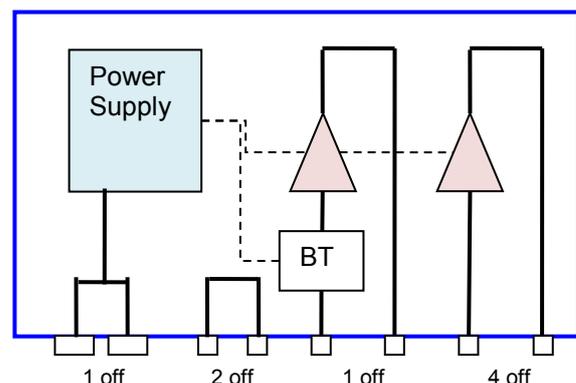
- Low noise amplifiers
- DC injection for powering active elements
- Adequate gain for cable loss, without compromising SFDR
- Rugged, rainproof construction

APPLICATIONS:

- Tall-mast top amplifier
- Masthead amplifier for monitoring stacks
- DF antenna amplifier

** can be changed to customer requirements

Block diagram



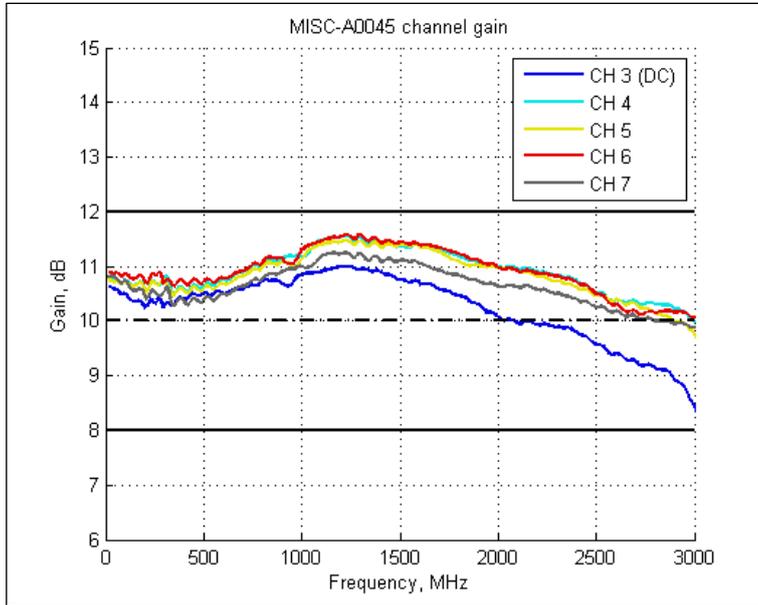
5-Channel Amplifier and DC Injector

20 – 3000 MHz

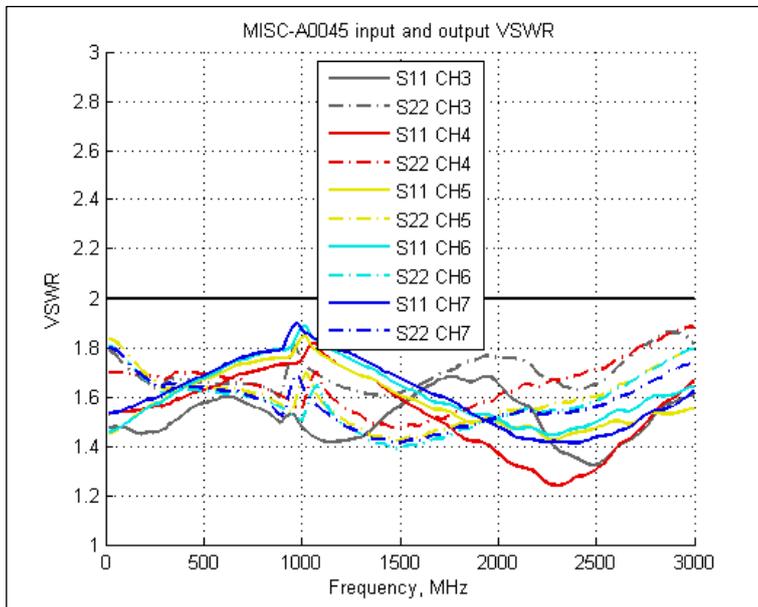
Product Code: MISC-A0045

VERSION: 3.4

MEASURED CHANNEL GAIN:



MEASURED VSWR:



AUTHORIZED USA DISTRIBUTION BY:

Cyntony Corporation
195 Follen Road
Lexington, Massachusetts
sales@cyntony.com
781-430-0675



GAIN THE ADVANTAGE