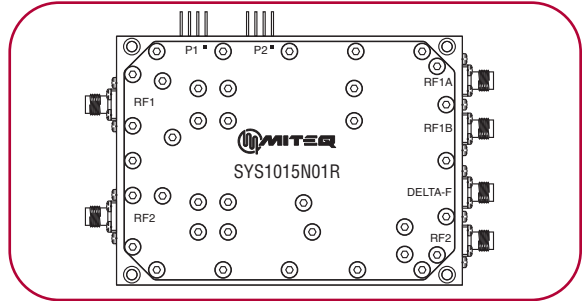


# DUAL-CHANNEL SIGNAL PROCESSOR ASSEMBLY

## MODEL: SYS1015N01R

### FEATURES

- Two medium power amplified channels
- Integrated mixer to measure difference frequency
- Integrated prescaler to measure absolute frequency using a low frequency DSP
- Integrated power control for output leveling

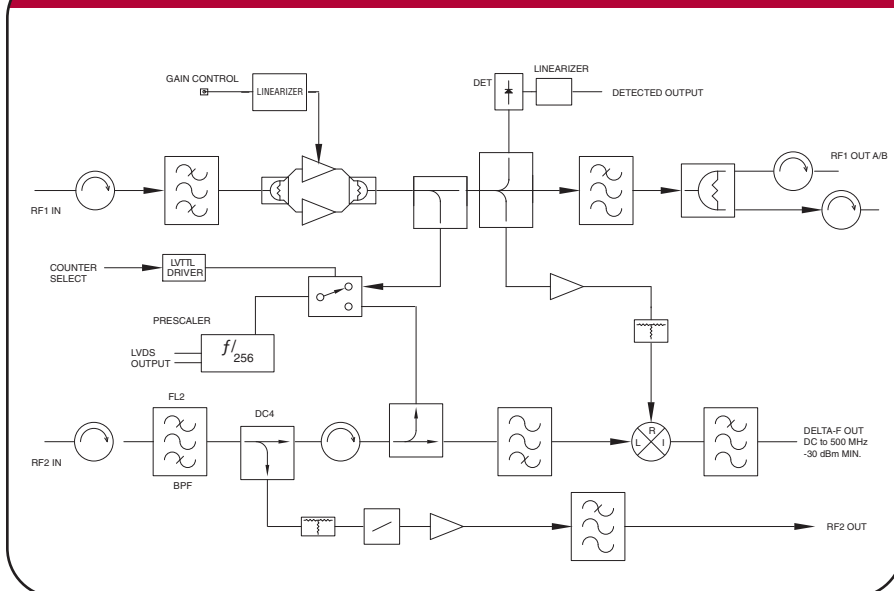


The SYS1015N01R is an integrated dual-channel signal processor for use in processing LOs in a microwave system. Integral gain control, power detector, mixer, and prescaler are used to control signal output power and monitor frequencies using lower frequency DSP technology. The unit is constructed for higher volume applications with surface mounted printed circuit boards designed for automated assembly.

### ELECTRICAL SPECIFICATIONS

INPUT PARAMETERS	CONDITION	UNITS	MIN.	TYP.	MAX.
RF frequency range		GHz	10		15
RF VSWR	50 ohm reference	Ratio			2:1
V+ bias current	@ +15 V			600	
V- bias current	@ -15 V			50	
TRANSFER CHARACTERISTICS	CONDITION	UNITS	MIN.	TYP.	MAX.
Conversion gain		dB		5	
Power control range		dB		10	
Spurious/harmonic output level		dBc			-70
Minimum output capability		dBm		+13	
OUTPUT PARAMETERS	CONDITION	UNITS	MIN.	TYP.	MAX.
IF frequency range		GHz	DC		0.5
IF VSWR		Ratio		2:1	

### BLOCK DIAGRAM



### MAXIMUM RATINGS

Specification temperature ..... +25°C  
 Operating temperature ..... 0 to 50°C  
 Storage temperature ..... -20 to +65°C