The 2017-370 Up/Downconverter converts 70 ±10 MHz to 370 MHz (Up) and 720 ±130 MHz to 370 MHz (Down). Synthesized local oscillators (LO) provide frequency translation. Multi-function push button switches select the gain, external 10 MHz input. Front panel LEDs provide indication of DC power (green), PLL alarm for up and downconverters (red), remote operation (yellow), and Upconverter mute (yellow). Gain can be manually controlled for 5 ± 5 dB range in 1 dB steps for the upconverter and downconverter as adjusted by the front panel multi-function push-button switches. Remote operation allows selection of gain and external 10 MHz. Gain and external 10 MHz input settings appear on the LCD display. Connectors are TNC female for IF and RF and BNC female for the external reference input and output. It is powered by a 100-240 ±10% VAC power supply and housed in a 1.75” X 19” X 16” 1RU chassis.

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**EQUIPMENT SPECIFICATIONS**

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**UPCONVERTER**

**Input Characteristics (IF)**

- Impedance/Return Loss: 50Ω/18 dB
- Frequency: 70 ± 12.5 MHz
- Noise Figure, max.: 15 dB
- Level: -19 ± 3 dBm

**Output Characteristics (RF)**

- Impedance/Return Loss: 50Ω/18 dB
- Frequency: 370 ± 12.5 MHz
- Level: -15 ± 3 dBm
- 1dB compression: +0 dBm

**Channel Characteristics**

- Gain range (adjustable): +5 ± 5 dB, 1dB steps
- Frequency Sense: Non-inverting

**Synthesizer Characteristics**

- Frequency Accuracy: ±0.01 ppm internal reference

**Other**

- RF Connector: TNC (female)
- IF Connector: TNC (female)
- 10 MHz Connectors: BNC (female), 50Ω/75Ω
- Alarm/Remote Connector: DB9 - NO or NC closure on Alarm
- Size: 19 inch, 1RU, 1.75” H X 16.0” D
- Power: 100-240 ±10% VAC, 47-63 Hz, 25 W

**Available Options**

- Q - RS485 Remote Interface
- W8 - Ethernet M&C Remote Interface

**DOWNCONVERTER**

**Input Characteristics (RF)**

- Impedance/Return Loss: 50Ω/18 dB
- Frequency: 720 ± 130 MHz
- Noise Figure, max.: 15 dB
- Level: -19 ± 3 dBm

**Output Characteristics (IF)**

- Impedance/Return Loss: 50Ω/18 dB
- Frequency: 370 ± 130 MHz
- Level: -15 ± 3 dBm
- 1dB compression: +0 dBm

**Channel Characteristics**

- Gain range (adjustable): +5 ± 5 dB, 1dB steps
- Image Rejection: > 20 dB, min
- Frequency Sense: Non-inverting

**Synthesizer Characteristics**

- Frequency Accuracy: ±0.01 ppm internal reference

**Other**

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**Front and Rear Panel**

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**Equipment Specifications**

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**UPCONVERTER**

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