The 2017-0415 Up/Downconverter converts 70 MHz to 406.05 MHz (Up) and 1.54455 GHz to 70 MHz (Down) with low group delay and flat frequency response. An integrated Loopback translator is included. Multi-function push button switches select the Loopback, reference mode and remote interface parameters. Front panel LEDs provide indication of DC power (green), PLL alarm for up and downconverters (red), remote operation (yellow), and Upconverter mute (yellow). Gain is fixed at 0 dB for the upconverter, +10 dB for the downconverter and -10dB for Loopback. Remote operation allows selection of all user front panel settings with the exception of remote interface. Frequency and gain appear on the LCD display except when Loopback is indicated. All connectors are 50Ω BNC female. The unit is powered by a 100-240 ± 10% VAC power supply and housed in a 1.75” X 19” X 16” 1RU chassis.

**Front Panel**

**EQUIPMENT SPECIFICATIONS**

**--------UPCONVERTER--------**

**Input Characteristics (IF)**
Impedance/Return Loss 50Ω /14 dB
Frequency 70 ± 10 MHz
Level 0 to -30 dBm

**Output Characteristics (RF)**
Impedance/Return Loss 50Ω/14 dB
Frequency 406.05 MHz
Level 0 to -30 dBm
1dB compression +10 dBm

**Channel Characteristics**
Gain 0 dB, fixed
Frequency Sense Non-inverting

**--------DOWNCONVERTER--------**

**Input Characteristics (RF)**
Impedance/Return Loss 50Ω /14 dB
Frequency 1.54455 GHz
Noise Figure, max. 15 dB (max gain)
Level -50 to -20 dBm
1dB compression -10 dBm

**Output Characteristics (IF)**
Impedance/Return Loss 50Ω/14 dB
Frequency 70 ± 10 MHz
Output Level Range -40 dBm to -10 dBm
1dB compression 0 dBm

**Channel Characteristics**
Gain (fixed) +10 dB
Image Rejection > 50 dB, min
Frequency Sense Selectable

**Available Options**
- E - External 10 MHz ref
- H - High Stability (±0.01ppm) Internal Ref.
- M&C Remote Interfaces:
  - Q - RS485
  - W8 - Ethernet w/Web Browser
  - W18 - Ethernet w/Web & SNMP
  - W28 - Ethernet w/TCPIP
  - W77 - FP Monitors IF/RF (BNC/SMR)

**Connectors/Impedance**
- M - 50Ω N-type (RF), 50Ω BNC (IF)
- N - 50Ω N-type (RF), 50Ω BNC (IF)

*Available Options for 10 MHz Connectors:
- B9 - NO or NC contact closure on Alarm

*10°C to 40°C; Specifications subject to change without notice