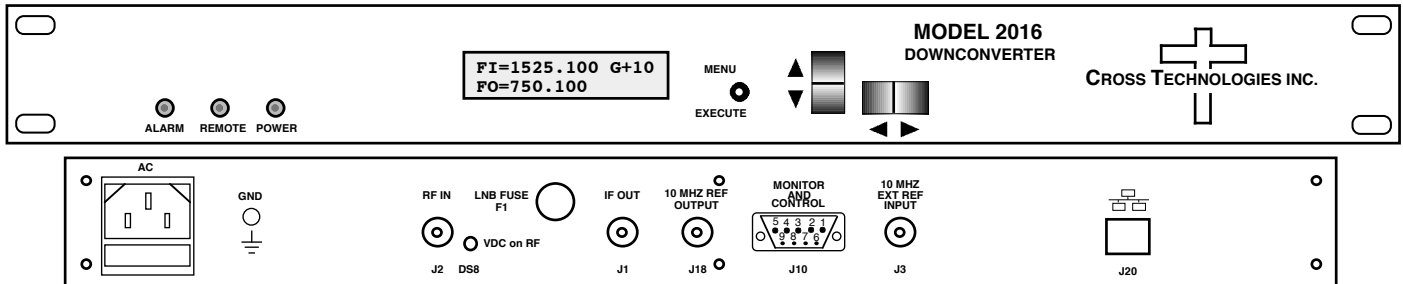


2016-02-790 Downconverter, 0.86-1.61 GHz to 430-790 ±5 MHz IF

The 2016-02-790 Downconverter converts 860 to 1610 MHz to 430-790 MHz in **100 kHz** steps with low group delay and flat frequency response. Synthesized local oscillators (LO) provide frequency selection. Multi-function switches select the input frequency, gain, and other parameters. Front panel LEDs provide indication of DC power, PLL alarm or Remote operation. Gain is adjustable manually (MGC) over a **-10 to +10 dB** range. The frequency and gain are remotely selectable. Parameter selection and frequency and gain settings appear on the LCD display. Connectors are Type F female for the RF, and BNC female for the IF and **external 10 MHz reference input and output**. **External 10 MHz is standard. A 10 MHz output connector contains either the internal or external 10 MHz reference signal whichever is selected by the user.** The 2016-02-790 is powered by a 100-240 ±10% VAC, 47-63 Hz power supply, and is contained in a 1 3/4" X 19" X 16" rack mount chassis.



2016-02-790 Front and Rear Panels (Optional Ethernet and LNB insertion shown)

EQUIPMENT SPECIFICATIONS*

Input Characteristics

Impedance/Return Loss 75Ω/10 dB
Frequency 860 to 1610 MHz
Noise Figure, Max. 20 dB max. gain
Input Level range **-65 to -45 dBm**

Output Characteristics

Impedance/Return Loss **50 Ω /14 dB**
Frequency **430-790 ±5 MHz**
Output Level Range **-65 to -45 dBm**
Output 1 dB compression **0 dBm, max. gain**

Channel Characteristics

Gain range (adjustable) **-10.0 to +10.0 dB, 1 ±1 dB steps**
Image Rejection **> 45 dB, min., 50 dB typical**
Frequency Response **±2.0 dB, 860 to 1610 MHz; ±1.0 dB, 10 MHz BW**
Spurious Response **< -45 dBc, in band**
Frequency Sense **Non-inverting**

Synthesizer Characteristics

Frequency Accuracy ± 1.0 ppm max. over temp (± 0.01 ppm option -H)
Frequency Step **100 kHz**

Phase Noise @ Freq	100Hz	1kHz	10kHz	100kHz	1MHz
dBC/Hz	-70	-70	-80	-90	-100

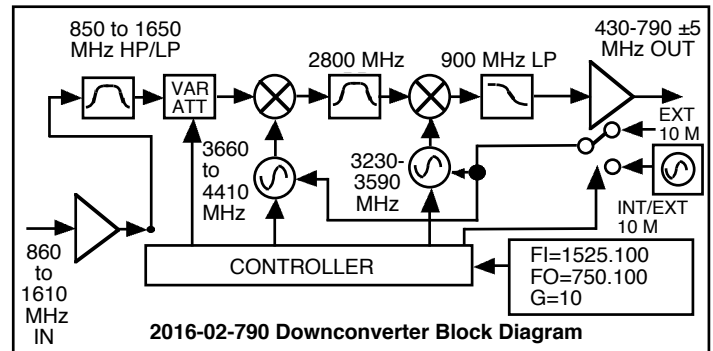
10 MHz Level (In or Out) **3 dBm, ± 3 dB, 75 ohms**

Controls, Indicators

Frequency Selection Direct readout LCD; manual or remote selection
Gain Selection Direct readout LCD; manual or remote selection
Power; Alarm; Remote Green LED; Red LED; Yellow LED
Remote RS232C, 9600 baud (**RS485, Ethernet Optional**)

Other

RF Connector Type F (female)
IF, 10 MHz Connectors BNC (female)
Alarm/Remote Connector DB9 (female) - NO or NC contact closure on Alarm
Size 19 inch, 1RU standard chassis 1.75" high X 16.0" deep
Power 100-240 ± 10% VAC, 47-63 Hz, **30 watts max.**



Available Options

H - High Stability (±0.01ppm) Internal Ref
Q - RS485 Remote Interface
W8 - Ethernet; w/Web Browser (WB)
W18 - Ethernet; w/WB & SNMP
W28 - Ethernet; w/TCP/IP, Telnet®
Connectors/Impedance
STD - 75Ω Type F (RF), 50Ω BNC (IF)
B - 75Ω BNC (RF), 75Ω BNC (IF)
C - 50Ω BNC (RF), 75Ω BNC (IF)
D - 50Ω BNC (RF), 50Ω BNC (IF)
F - 75Ω Type F (RF), 75Ω BNC (IF)
K - 75Ω BNC (RF), 50Ω BNC (IF)
M - 50Ω Type N (RF), 50Ω BNC (IF)
N - 50Ω Type N (RF), 75Ω BNC (IF)
S - 50Ω SMA (RF), 50Ω BNC (IF)

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