The Model 8451 may be used in a wide variety of signal distribution applications including sine wave, time code, and digital signals, through the range of DC - 10 MHz. Power supply voltages are post regulated and output buffers are all individually regulated, insuring very low output spurious noise levels. Fault sensing is provided on each output channel and all channels are summed together providing one common fault output.

### Application
- Defense (Military) ■ SatCom ■ Wireless

### Features
- Frequency and Digital Distribution
- 12 Outputs, Single Input
- 3 Vrms Output Drive Into 50Ω
- Low Spurious and Phase Noise
- 80 dB Port to Port Isolation

### Description:
The Model 8451 is a frequency distribution unit designed for Defense, SatCom, and Wireless applications. It is capable of handling signals from DC to 10 MHz, providing high fidelity distribution with low spurious noise levels. The unit includes fault sensing on each output channel and a summed common fault output, making it suitable for complex signal distribution systems.

### Specifications:
#### Input Characteristics
- **Frequency**: DC - 10 MHz
- **Impedance**: 50Ω nominal
- **Level**: 1.0 Vrms nominal
- **Protection**: Protected to 24 V peak to peak

#### Output Characteristics
- **Channels**: Twelve
- **Impedance**: 50Ω nominal
- **Level**: 0.0 to 3.0 Vrms, each output individually adjustable
- **Harmonic Distortion**: ≤ -40dBc at 3.0 Vrms Output
- **Non-Harmonic Distortion**: ≥ -80dBc at 3.0 Vrms Output
- **Isolation Output to Output**: -80 dBc @ 10 MHz
- **Phase Noise**: -150 dBc noise floor
- **Protection**: Outputs may be shorted to ground with no damage. Output buffers are thermally protected

- **Signal/Fault Connectors**: BNC
- **Fault Status**: Fault interface is 74HC type, logic level is "low" for fault
- **Dimensions**: 1.72 High (1U), 19 inches wide, and 14 inches deep (exclusive of connectors and handles)
- **Weight**: 9.5 pounds with optional slides
- **Finish**: Anodized clear, brushed aluminum
- **Operating Temperature**: 0° C to +50° C
- **Humidity**: 95% relative, non-condensing, with modules
- **Power**: Single power supply standard or redundant power supplies optional. 100 - 240 VAC, 48 - 440 Hz. 35 watts maximum power consumption.
- **IEC-320 power input connector
- **Signal/Fault Connectors**: BNC