

Distribution Amplifier

FS730 and FS735 series — Broadband 50 Ω distribution amplifiers



FS730/4 Front Panel



FS735/1/4 Rear Panel with one Broadband 50 Ω distribution amplifier and one 10 MHz distribution amplifier side by side.

FS730 & FS735 Series Broadband 50 Ω Distribution Amplifiers

- **Input protection**
- **Flat frequency response**
- **Large dynamic range**
- **Low noise**
- **High current compliance**

This distribution amplifier is intended to distribute broadband (dc-100 MHz) analog signals over 50 Ω coax. The amplifier has one input and seven outputs, all on BNC connectors. The input and outputs are dc coupled with a 50 Ω impedance. Applications include the distribution of frequency references, IRIG timing signals, composite video, audio, etc.

There are four indicator LEDs. The “power” LED indicates that the unit has ac power. The “signal” LED indicates that an input signal greater than 300 mV is present. The “overload” LED indicates that the input signal has exceeded ± 2 V.

• **FS730/4 ... \$1150 (U.S. list)**

• **FS735/4/4 ... \$1750 (U.S. list)**

Configuration

The FS73x series of products can be configured as half width, 1U size benchtop instruments (FS730), or in full-width, 19" rack-mount enclosures (FS735).

The FS730/4 model provides 7 output BNC connectors on the front panel, and one or two units can be rack mounted with an optional rack mount kit.

The FS735/4/4 model provides 14 output BNC connectors on the rear panel, with status indicators on the front panel. Several types of distribution amplifiers are available as listed below. Different types may be combined within the FS735 chassis.

- Option 1 - 10 MHz distribution amplifier
- Option 2 - 5 MHz distribution amplifier
- Option 3 - CMOS logic distribution amplifier
- Option 4 - Broadband 50 Ω distribution amplifier
- Option 5 - Broadband 75 Ω distribution amplifier



FS730/4 Rear Panel



FS735/1/4 Front Panel

FS730 & FS735 series Specifications

Input

Impedance	50 Ω, ±1 %
Linear range	± 2 V
Damage (dc)	5 VDC
Damage (1μs)	100 V

Output

Impedance	50 Ω, ±1 %
Nominal load	50 Ω

Performance (50 Ω loads)

Gain (50 Ω load)	× 1.00, ±2 %
Gain (high-Z load)	× 2.00, ±1 %
Bandwidth (-3 dB)	>100 MHz
Noise at 1 kHz	<15 nV/√Hz
Offset	<1 mV
Isolation (10 MHz)	>100 dB

Additive phase noise

(with 10 MHz, +7 dBm input)

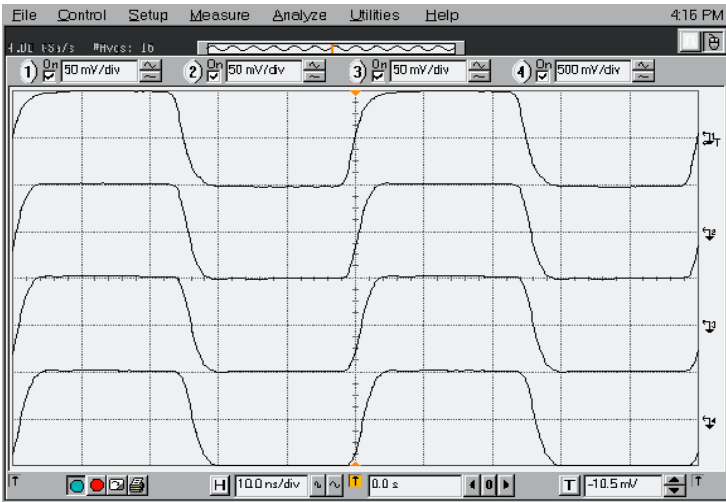
Offset (Hz)	Noise (dBc/Hz, Typical)
1	-138
10	-147
100	-152
1k	-153
10k	-153
100k	-153

General

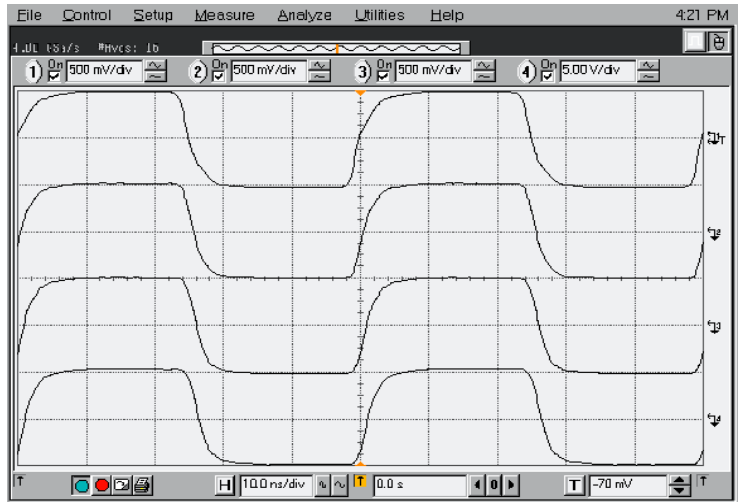
Power	10 W, 100/120/220/240 VAC, 50/60 Hz
Dimensions	8.3" × 1.5" × 8.0" (WHL)
Warranty	One year parts and labor on defects in materials and workmanship

Ordering Information

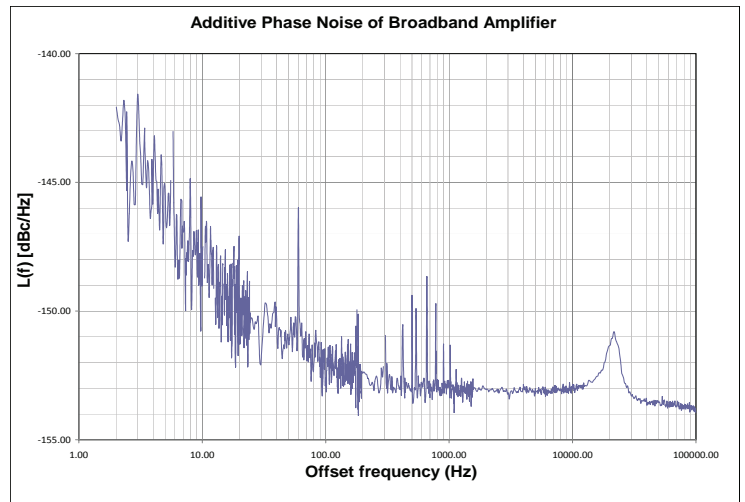
FS730/4	Broadband 50 Ω distribution amp with BNCs on front	\$1150
RMIU	1U dual rack-mount for one or two FS730s	\$85
FS735/4/4	Two distribution amps with BNCs on rear	\$1750



Broadband 50 Ω distribution amp., small signal response



Broadband 50 Ω distribution amp., large signal response



Broadband 50 Ω distribution amp., additive phase noise