

FDU-240

Multi Channel Frequency Distribution Unit



The FDU-240 is a high output count and high performance frequency distribution amplifier.

The FDU-240 provides 24 output channels of a single reference frequency, typically 10MHz.

The FDU-240 may be configured either as a distribution amplifier with automatic or manual selection from dual inputs as a standalone frequency source. It may also be configured with a combination of internal and external frequency references.

The FDU-240 detects failure of either input reference and provides manual or automatic switchover between the two input frequency reference sources.

Internal reference oscillator options available are free running OCXO or free running rubidium oscillator.

The FDU-240 has 24 individually buffered low phase noise outputs.

The FDU-240 has a provision to include an internal synthesizer to generate a different output frequency from the input references – for example, outputs at 12.8MHz may be generated from 10MHz inputs.

Power supply options include 115/230 VAC, 48, 24, or 12 VDC.

The FDU-240 is configured as a 1U 19" rack mount unit. Optional rack mount slides are available.

FEATURES

- Dual inputs with manual or automatic switchover
- 24 individually buffered outputs
- Low phase noise output buffers
- Optional built in frequency standards
- Optional frequency synthesizer

Applications

- Satellite Communications
- Broadcasters
- Microwave Terminals

Key Benefits

- Low Phase Noise 10 MHz Outputs
- 2x Frequency Input to 16x Frequency Output
- Optional Cleanup Oscillator
- Designed for High Availability & High Reliability operation

Specifications

Frequency Inputs

No of Inputs	Two
Frequency	10MHz standard Optional 1, 5, 10, 10.492, 12.8, 13, 19.6608, and 64 MHz
Level	0.8 to 1.2 Vrms standard
Connector	BNC

Alarm Input

Input Type	Relay contact closure or TTL level
Connector	DB9 shared with output

Frequency Outputs

No of Outputs	24 buffered outputs from the selected input
Frequency	10MHz standard Optional 1, 10, 10.492, 12.8, 13, 19.6608, and 64.8 MHz
Level	1Vrms into 50 ohm (13dBm)
Connector	BNC

Alarm Output

Output Type	Relay contact Form C
Connector	DB9 shared with input

Controls and Indicators

Reference Select	Select A, B, or Automatic
Indicators	Power Reference A selected Reference A available Reference B selected Reference B available Power Fault

Options

Internal Reference Oscillator

OCXO	Stability	5x10 ⁻⁹ 0 ⁻⁵⁰ °C
	Aging	5x10 ⁻⁸ per year
Rubidium	Stability	±1x10 ⁻¹⁰ 0-50 °C
	Aging	5x10 ⁻¹¹ per month

Power

Voltage	115/230 VAC Switching 115 VAC-only (Optional) 230 VAC-only (Optional)
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Environmental

Temperature	-10 to +50°C
Humidity	95% non-condensing

Physical

Size:	19" rack-mount 1U high (1.75") 8" deep
Weight:	11 lbs. typical

Ordering Information

FDU240	-AA	-BB	-CC	-DD	-EE
Option	Input	Ref. 1	Ref. 2	Output Frequency	Power
00	Dual External	External	External	10MHz	115/230 VAC
01	Single Internal	OCXO	OCXO	5MHz	115 VAC
02	Dual Internal	Rubidium	Rubidium	10.492MHz	230 VAC
03	Internal/ External	GPS OCXO	GPS OCXO	12.8MHz	
04				13MHz	
05				19.6608MHz	
06				64.8MHz	

Note: Option rows EE, FF are only available with GPS OCXO option e.g. FDU240-00-00-00-00-00 is Standard Unit with dual external 10 MHZ reference, 115/230 VAC power.