



# WR-10 Frequency Block Downconverter 75-110 GHz: FBC-10-FB-0001

Farran offers the FBC series of down converters for use as frequency extenders for noise figure measurement test systems.

The FBC-FB-XX is a fullband system can be built upon an Keysight N8975A Noise Figure Analyzer (NFA) or X-Series Signal Analyzers with Option N9069A. The system allows the user to extend the frequency range of the NFA to allow for accurate noise figure measurements to be performed on a device covering V, W, F, D and G bands (50-220 GHz), when used with an Keysight E8247C signal generator (or equivalent). The FBC-10-FB-0001 covers the full W Band 75 - 110 GHz.

## Key Facts:

- Full band noise figure measurements
- Compatible with Keysight NFA and Keysight PXA with noise figure personality
- Low noise figure for high system accuracy
- Convenient packing to match the VNA frequency extension



## APPLICATIONS

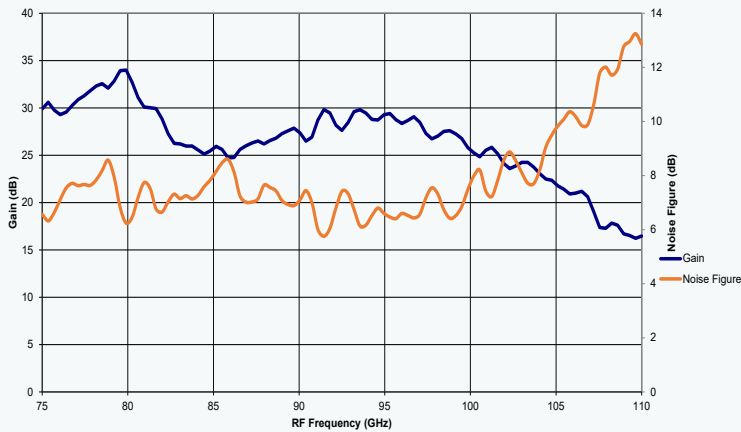
- Communications
- OEM test instrumentation
- EW and ECM systems
- Radar front ends
- Frequency extenders for noise figure measurement systems



## ACCESSORIES

- User Manual

Gain & Noise Figure v RF Frequency



“We used a Farran FBC & WGNS combination with our existing N8975 Noise Figure System and it operated seamlessly. We are very happy with the performance and the measurements results we are now getting.”

**Telecommunications Engineer Team Lead, US Wireless  
Communications Corporation**



## Product Specification

System Specification	Unit	Min	Typ	Max
System Operating Frequency	GHz	75	-	110
System Conversion Gain	dB	+10	-	-
System Noise Figure	dB	-	12	15
IF Output Frequency	MHz	-	11.139	-
LO Input Frequency	GHz	9.375	-	13.75
LO Input Power	dBm	+5	-	+10
Test Port Damage Level	dBm	+5	-	-
Test Port Interface	-	WR-10 UG-387/U-M		
LO Connector	-	SMA 3.5 mm (F)		
IF connector	-	SMA 3.5 mm (F)		
Power Requirements	-	240/110 V AC		
Weight (approx.)	kg	3.5		
Dimensions (L x W x H)	mm	290 x 120 x 90		



### SERVICES AVAILABLE

- Technical Support
- Installation and Setup
- Maintenance
- Application Support
- Hardware Support

For more information on any of our products or services please visit our website: [www.farran.com](http://www.farran.com)



### TECHNICAL SUPPORT

- Technical support provided directly by our knowledgeable and friendly engineers.
- Support for pre- and post-purchase: system configuration, installation and troubleshooting.



### PRODUCT INSIGHTS

- For more product insights register at [www.farran.com/customer](http://www.farran.com/customer)
- Additional information: test data, CAD drawings and 3D models available.



### WARRANTY

- Standard 3 year warranty.
- Up to 5 year warranty optional.

### Specification Definitions

**Nominal value (nom.)** – ensured by design, not tested. **Measured value (min, max)** – expected and warranted product performance obtained from the actual measurements of product sample. **Non-traceable measured value (n. trc. meas.)** – expected product performance obtained from the actual measurements of a product sample by means of using Farran's own equipment and methods. Traceable only to Farran laboratory equipment. **Typical data (typ.)** – value that represents the product specification met over 90% of bandwidth or a mean value.

**Specifications without limits** – represent the warranted product performance; with values of no or a negligible deviation from the given value and as such have a secondary impact on the product performance.

