



WR-06 Frequency Block Downconverter 110-170 GHz: FBC-06-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 Ka, U, V, E and W bands (26.5-170 GHz), when used with an Keysight E8247C signal generator (or equivalent). The FBC-06-FB-0001 covers the full D Band 110 – 170 GHz range.

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



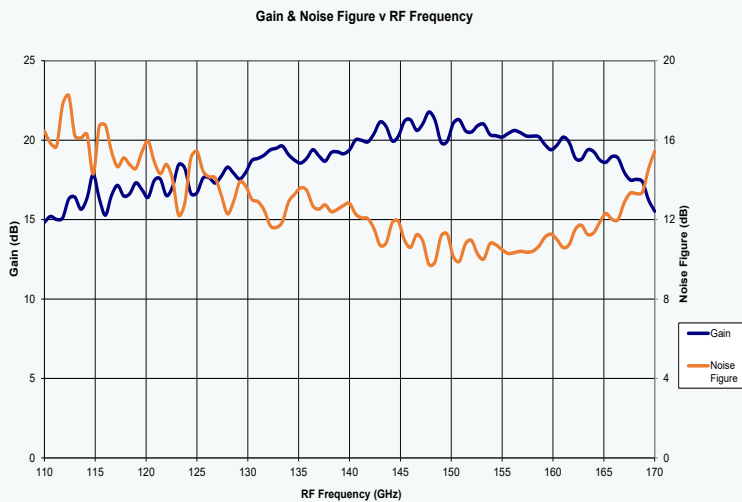
APPLICATIONS

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



ACCESSORIES

- User Manual



“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 | 110 | - | 170 |
| System Conversion Gain | dB | +10 | - | - |
| System Noise Figure | dB | - | 18 | 20 |
| IF Output Frequency | MHz | - | 11.139 | - |
| LO Input Frequency | GHz | 9.167 | - | 14.167 |
| LO Input Power | dBm | +5 | - | +10 |
| Test Port Damage Level | dBm | +5 | - | - |
| Test Port Interface | - | WR-06 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



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
- 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.

