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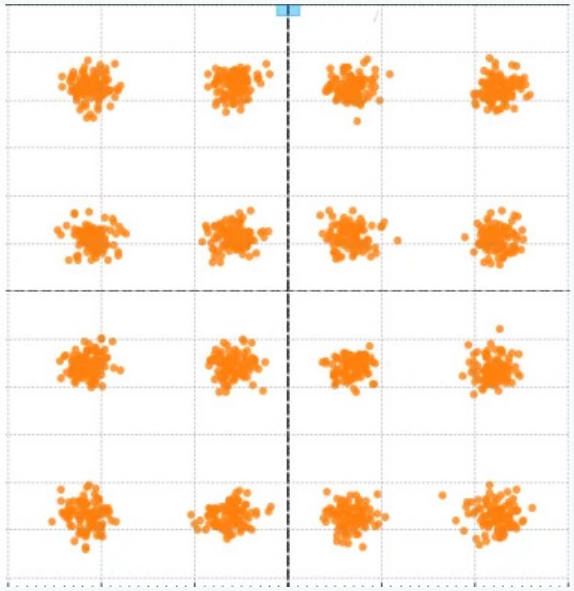
1.85mm 5G Communication Extender 24.5-52.6 GHz: **FCE-V-TR-0001**

Farran offers the FCE series of up/down converters for use as frequency extender communication test equipment.

The FCE-V-TR-0001 covers the 24.5 - 52.6 GHz band of interest for 5G Communications. It is a unique, dedicated Transmit/ Receive system for 5G, compliant with the most recent 3GPP release 17 millimeter wave frequency range.

Key Facts:

- Specifically designed to operated in the 3GPP millimeter wave frequency range (24.25 - 52.6 GHz)
- The FCE-V-TR-0001 offers enhanced performance over the most recent 3GPP definition of 5G (release 17)
- It is a single millimeter wave electronically tunable module that is cost effective, and reduces development and test time.



Features

- Broad bandwidth measurements
- Low noise figure & good output power for high system dynamic range
- Convenient packing

Applications

- Frequency extenders for communication measurement systems
- 5G Backhaul Equipment Testing.
- Antenna Testing
- 5G system chip measurement

"We are delighted to have released this product, that has been designed with Farran's extensive expertise in mmWave to the fore. Combined with our deep knowledge of up & down converter systems to work with industry leading test equipment, we expect the FCE series of product to help our customers extend the range of their existing test equipment & meet the challenges that 5G will present".

Michael Crowley, Principal Engineer at Farran.
Designer of FCE-V-TR-0001

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Product Specification

System Specification	Unit	Min	Typ	Max
Upconversion				
System Operating Frequency	GHz	24.25	-	52.6
System Conversion Gain	dB	-	TBC*	-
Output Power @ P1dB *	dBm	2	8	-
IF Input Frequency*	GHz	-	6	-
Downconversion				
System Operating Frequency	GHz	57	-	65
System Conversion Gain	dB	-	TBC	-
Receiver Noise Figure	dB	-	12	-
IF Output Frequency	GHz	-	6	-
LO Input Details				
LO Input Frequency	GHz	9.5	-	15
LO Input Power	dBm	+5	-	+10

Test Port Interface	-	V 1.85 mm (F)
LO Connector	-	SMA 3.5 mm (F)
IF Connector	-	SMA 3.5 mm (F)
Power Requirements	-	240/110 V AC
Weight	kg	3.5
Dimensions (L x W x H)	-	290 x 120 x 90

Notes:
1. System Conversion Gain: Variable to customer requirements
2. Output Power: Higher Output Powers available on request for specfic frequency bands
3. IF Input Frequency: IF input IQ signal on 4-6 GHz Carrier

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.