



RFME RF MICROTECH
ELECTRONICS

Company Overview

- ① RF Microtech Electronics (RFME) is a company based in Vadodara, Gujarat, India.
- ① We are into research, design and development of projects since 2017.
- ① We initiated with the venture “RF Microtech Electronics” where we are currently developing compact economical RF based measuring equipment.
- ① Our recent products include signal sources upto 20 GHz and Power Detectors capable of Detecting signals up to 10 GHz.

Why us?

- ① It has been observed that majority of the equipment used by engineers/technicians are bulky and expensive.
- ② This leads to inadequate testing.
- ③ These equipment can be replaced by our portable Signal Sources and Power Detectors.
- ④ Our Signal Sources cover a range from 0.01 to 20 GHz and power detectors from 1 MHz to 10 GHz.

Our Products

01

Signal Sources

Variable and Fixed (0.01 to 20GHz)
Broadband Signal Sources up to 20GHz

Power Detectors up to 10GHz

02

Splitters, Combiners, Pre-Amplifier,
Digital Step Attenuators

03

Filters, Directional
Couplers, Return loss
bridge

04

Range Of Products

05

Spectrum Analyzer

Frequency Range (0.01 to 40GHz)

Network Analyzers

Frequency Range(0.01 – 40GHz).

06

07

Signal Generators

0.01 -20GHz

Antenna test fixtures , Power meters, power amplifiers , RF shield box

08

Signal Sources



Mechanical Specifications

Shape	Hex
Weight:	300gms
Size (W x L x H) :	115 x 132.8 x 19.7

Electrical Specifications

Output Power:	0dBm (Max.)
Harmonics:	-20dBc
VSWR:	2:1, all Phases
Output Impedance:	50 Ohm
Mode of Operation:	Single/ Sweep
Sweep Time:	1s/2s/5s/10s
Phase Noise:	-137dBc/HZ
Frequency Drift Rate:	± 600 KHz
Center Frequency	1 %
Accuracy:	
Number of Steps:	250
Frequency Resolution:	1MHz
Display :	4 Digit 7 Segment
Operating temperature:	0 °C to 50 °C
Battery Operation :	8 Hour for single charge
Connector:	SMA Female
Power Consumption:	0.3 Watt (Max.)

Signal Sources

- ❑ Frequency Range: 51 MHz-9.02 GHz.
- ❑ Features: Long battery life, economical, small and rigid design
- ❑ Applications:
 - ◆ Scientific equipment manufacturer
 - ◆ EMC Test Laboratories
 - ◆ Microwave system manufacturer
 - ◆ Antenna manufacturer
 - ◆ Bluetooth devices manufacturer
 - ◆ WIFI and WIMAX manufacture

RFME Signal Source Models

Sr No.	Model No.	Start Frequency(MHz)	Stop Frequency(MHz)
1	RFTxV516-636	51	63
2	RFTxV107-127	100	129
3	RFTxV197-257	194	255
4	RFTxV337-447	330	446
5	RFTxV497-657	494	655
6	RFTxV787-927	781	920
7	RFTxV807-967	802	966
8	RFTxV887-108	881	1020
9	RFTxV108-128	1010	1280
10	RFTxV208-218	2020	2160
11	RFTxV208-228	2050	2250
12	RFTxV198-238	1930	2310
13	RFTxV218-268	2130	2600
14	RFTxV228-258	2230	2540

RFME Signal Source Models

Sr No.	Model No.	Start Frequency(MHz)	Stop Frequency(MHz)
15	RFTxV248-288	2410	2870
16	RFTxV268-328	2680	3210
17	RFTxV298-368	2960	3610
18	RFTxV328-378	3270	3720
19	RFTxV358-408	3510	4090
20	RFTxV388-468	3840	4640
21	RFTxV428-528	4270	5220
22	RFTxV478-578	4740	5750
23	RFTxV528-648	5220	6490
24	RFTxV578-708	5790	7060
25	RFTxV628-768	6250	7650
26	RFTxV668-838	6600	8330
27	RFTxV718-908	7120	9020

Power Detector

- ① The RFME Power Detector operates from 1MHz to 10GHz .
- ① It converts an RF input signal to a corresponding decibel-scaled output.
- ① It employs a progressive compression technique over a cascaded amplifier chain in which each stage is equipped with a detector cell.
- ① The input dynamic range is typically 50dB with less than ± 3 dB error.
- ① They are used in various communication test setups for either measurement or controller modes.

Power Detector



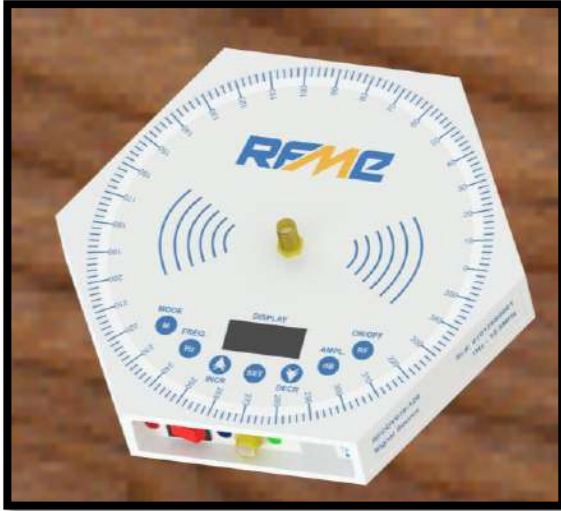
Mechanical Specifications

Shape	Hex
Weight:	300gms
Size (W x L x H) :	115 x 132.8 x 19.7

Electrical Specifications

Output Power:	0dBm (Max.)
Harmonics:	-20dBc
VSWR:	2:1, all Phases
Output Impedance:	50 Ohm
Mode of Operation:	Single/ Sweep
Sweep Time:	1s/2s/5s/10s
Phase Noise:	-137dBc/HZ
Frequency Drift Rate:	± 600 KHz
Center Frequency	1 %
Accuracy:	
Number of Steps:	250
Frequency Resolution:	1MHz
Display :	4 Digit 7 Segment
Operating temperature:	0 °C to 50 °C
Battery Operation :	8 Hour for single charge
Connector:	SMA Female
Power Consumption:	0.3 Watt (Max.)

Direct Digital Synthesizer



Mechanical Specifications

Shape	Hex
Weight:	500gms
Size (W x L x H) :	165.5 x 143.3 x 82.74

Electrical Specifications

Output Power :	-15.5 to 0dBm
VSWR:	2:1,all Phases
Output Impedance	50ohms
Sweep Time	1s/2s/5s/10s
Center Frequency Drift	±0.1 %
Output Power Variation	±1dBm
OLED Display :	27.0 X 11.5 mm (128 X 32)
Operating temperature:	0 °C to 50 °C
Battery Operation :	8 Hours on a single charge
Input / Output Connector:	SMA (F)
Power Consumption:	1.10 Watt (Max.)

Direct Digital Synthesizer

- ❑ Frequency Range: 1Hz-400 MHz.
- ❑ Features :long battery life, economical small and rigid design.
- ❑ Applications:
 - ◆ Liquid and gas flow arrangement.
 - ◆ Sensory applications: proximity motion and defect detection.
 - ◆ Test and Medical equipment.
 - ◆ Frequency stimulus waveform generation.

RFME Direct Digital Synthesizer Models

Sr No.	Model Number	Start Frequency (Hz)	Stop Frequency (MHz)	Amplitude Range (dBm)
1	RFDDV010-126	01	12.5	-15.5 to 0
2	RFDDV010-407	01	400	-15.5 to 0

Broadband Signal Sources.



Mechanical Specifications

Shape	Hex
Weight:	500gm
Size (W x L x H) :	165.5 x 143.3 x 82.74

Electrical Specifications

Output Power :	-15.5 to 0dBm
VSWR:	2:1,all Phases
Output Impedance	50ohms
Sweep Time	1s/2s/5s/10s
Center Frequency Drift	±0.1 %
Output Power Variation	±1dBm
OLED Display :	27.0 X 11.5 mm (128 X 32)
Operating temperature:	0 °C to 50 °C
Battery Operation :	8 Hours on a single charge
Input / Output Connector:	SMA (F)
Power Consumption:	1.10 Watt (Max.)

Broadband Signal Sources.

- ❑ Frequency Range: 35MHz-13.9GHz.
- ❑ Features: Long Battery life, economical, small & rigid design.
- ❑ Applications:
 - ❖ Test equipment
 - ❖ WLAN,CATV equipment
 - ❖ Clock generation
 - ❖ Point to Point/point to multipoint microwave link satellites, VSATS.

RFME Broadband Signal Source Models

Sr No.	Model Number	Start Frequency (MHz)	Stop Frequency (MHz)	Amplitude Range (dBm)
1	RFSSV356-448	35	4400	-37.25 to +5
2	RFSSV516-688	51.6	6800	-47 to +5
3	RFSSV516-139	51.6	13900	-47 to +5

Digital Step Attenuator



Mechanical Specifications:

Shape:	T Shape
Weight:	310gm
Size (W x L x H) :	103mm x 114.7mm x 25mm

Electrical Specifications:

Output Impedance:	50 Ohms
OLED Display :	27.0 X 11.5 mm (128 X 32)
Operating temperature:	0 °C to 50 °C
Battery Operation :	8 Hour on a single charge
Input / Output Connector:	SMA (F) / N (F)
Power Consumption:	2.07 Watt (Max.)

Digital Step Attenuator

- Frequency Range: DC-10 GHz.
- Features: Long Battery Life , economical, small and rigid design.
- Applications:
 - ◆ Cellular infrastructure
 - ◆ Microwave radios and VSATS.
 - ◆ Test equipment and sensors.
 - ◆ Cellular/3G infrastructure.
 - ◆ WiBro/WIMAX/4G.

RFME Digital Step Attenuator Models

Sr No	Model Number	Start Frequency (GHz)	Stop Frequency (GHz)	Attenuation (dBm)	Step Size (dBm)
1	RFATV107-608-30B	0.1	6.0	31.5	0.5
2	RFATV107-608-30A	0.1	6.0	31.75	0.25
3	RFATV000-109-30D	DC	10.0	45	3
5	RFATV107-608-60B	0.1	6.0	63	0.5
6	RFATV107-608-60A	0.1	6.0	63.5	0.25
7	RFATV000-109-60D	DC	10.0	90	3
9	RFATV107-608-90B	0.1	6.0	94.5	0.5
10	RFATV107-608-90A	0.1	6.0	95.25	0.25
11	RFATV000-109-90D	DC	10.0	135	3

Preamplifier



Electrical Specifications

Supply Voltage	5V
IP/OP Impedance	50 ohms
Connector	SMA Edge Mount
Operating Temp	-40 to 85 C
Power Consumption	0.4 Watts(max).

Mechanical Specifications

Shape:	Rectangular
Weight:	50 grams
Size (W x L x H) :	40mm x 36.6mm x 17.4mm

Preamplifier

- Frequency Range: DC-10 GHz.
- Features: economical, small & rigid design.
- Applications:
 - ◆ Software Defined Radios
 - ◆ Radar applications
 - ◆ Hiper LAN
 - ◆ Wireless Local Loop
 - ◆ MMDS
 - ◆ Electronic Warfare.

RFME Preamplifier Models

Sr No.	Model Number	Start Frequency (GHz)	Stop Frequency (GHz)	Gain (dB)
1	RFPRV000-608-A10	DC	6.0	10
2	RFPRV000-608-A20	DC	6.0	20
3	RFPRV000-608-A30	DC	6.0	30
4	RFPRV000-608-A40	DC	6.0	40
5	RFPRV106-109-A10	0.01	10.0	10
6	RFPRV106-109-A20	0.01	10.0	20
7	RFPRV106-109-A30	0.01	10.0	30
8	RFPRV106-109-A40	0.01	10.0	40

For More Details

- ① Kindly reach out to us at : www.rfme.in
- ① Queries/Support : info@rfme.in
- ① For sale : sales@rfme.in