

Benchtop DDS RF Generator

Features:

- 100 kHz to 1 GHz continuous coverage
- AD9915 DDS core with 12-bit DAC
- Front-panel display and rotary control
- CW, AM, FM, FSK and phase control
- Frequency sweep and 8 profile presets



DRA-RF1000-BENCH

RF Performance

Frequency range	100 kHz – 1 GHz
Frequency setting	1 Hz resolution
Output level	-80 to +13 dBm, 0.1 dB steps
RF output	1 channel, SMA female, 50 ohm
Internal DDS clock	2.5 GSPS

Signal Control

Operating modes	CW, AM, FM, FSK, PSK, sweep
Phase control	0 – 360 degrees, 16-bit resolution
Amplitude scaling	12-bit digital control
Profiles	8 frequency / phase profiles

Interface & Environment

Reference input	10 MHz external reference
Control interface	Front panel, USB and LAN
Power supply	12 VDC / 2 A
Operating temperature	0 to +50°C

Laboratory measurements, receiver alignment and automated RF testing

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RF SIGNAL GENERATION

DRA-RF1000-BENCH

Compact DDS Signal Generator

Features:

- 100 kHz to 1 GHz in a compact chassis
- PC control for repeatable test sequences
- CW output with linear or stepped sweep
- Dedicated trigger output for test timing
- External 10 MHz frequency reference



DRA-RF1000-COMPACT

RF Performance

Frequency range	100 kHz - 1 GHz
Frequency setting	1 Hz resolution
Output level	-60 to +10 dBm, 0.1 dB steps
RF output	1 channel, SMA female, 50 ohm
DDS engine	AD9915, 2.5 GSPS, 12-bit DAC

Signal Control

Waveform modes	CW, AM, FM, FSK and sweep
Phase resolution	16 bits
Frequency profiles	8 programmable profiles
Trigger output	3.3 V logic, SMA connector

Interface & Environment

Reference input	10 MHz external reference
Control interface	USB 2.0, PC command control
Power supply	12 VDC / 1.5 A
Operating temperature	0 to +50°C

RF teaching labs, small test benches and hobby receiver experiments

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RF SIGNAL GENERATION

DRA-RF1000-COMPACT

Mini USB RF Signal Generator

Features:

- 100 kHz to 1 GHz in a portable enclosure
- One REF IN port and one RF OUT port
- Single-ended 50 ohm RF output
- USB control for frequency and amplitude
- 8 profiles for fast frequency selection



DRA-RF1000-MINI

RF Performance

Frequency range	100 kHz - 1 GHz
Frequency setting	1 Hz resolution
Output level	-30 to +3 dBm
RF output	1 x RF OUT, SMA female, 50 ohm
DDS engine	AD9915, 2.5 GSPS, 12-bit DAC

Clock & Signal Control

Reference input	1 x REF IN, SMA, 10 MHz
Signal modes	CW, FSK and frequency sweep
Phase resolution	16 bits
Frequency profiles	8 programmable profiles

Interface & Environment

Control interface	USB 2.0
Power supply	5 VDC / 2 A
Typical consumption	5 W
Operating temperature	0 to +50°C

Portable lab work, receiver testing and VHF/UHF hobby projects

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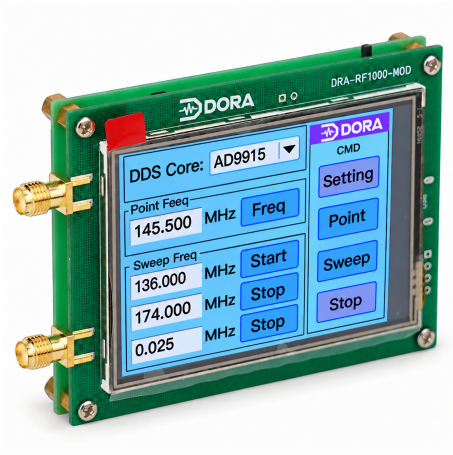
RF SIGNAL GENERATION

DRA-RF1000-MINI

Touchscreen DDS RF Module

Features:

- Standalone touchscreen frequency control
- 100 kHz to 1 GHz DDS signal generation
- Programmable start, stop and step sweep
- SPI and UART for embedded integration
- SMA RF output for laboratory fixtures



DRA-RF1000-MOD

RF Performance

Frequency range	100 kHz - 1 GHz
Frequency setting	1 Hz resolution
Output level	-20 to +3 dBm
RF output	SMA female, 50 ohm
DDS engine	AD9915, 2.5 GSPS, 12-bit DAC

Control & Display

Display	3.5-inch color touch display
Signal modes	CW, FSK and frequency sweep
Digital control	SPI, UART and USB
Frequency profiles	8 programmable profiles

Integration & Environment

External reference	10 MHz input
Module format	Open PCB with mounting holes
Power supply	12 VDC / 1 A
Operating temperature	-10 to +60°C

Embedded RF instruments, student projects and custom test fixtures

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RF SIGNAL GENERATION

DRA-RF1000-MOD

Embedded RF Generator

Features:

- Shielded aluminium housing with flanges
- 100 kHz to 1 GHz AD9915 DDS source
- REF IN and RF OUT SMA connections
- USB control for production test systems
- CW and repeatable frequency sweep



DRA-RF1000-IND

RF Performance

Frequency range	100 kHz - 1 GHz
Frequency setting	1 Hz resolution
Output level	-60 to +7 dBm
RF output	1 channel, SMA female, 50 ohm
DDS engine	AD9915, 2.5 GSPS, 12-bit DAC

Clock & Signal Control

Reference input	10 MHz, SMA connector
Signal modes	CW, AM, FM, FSK and sweep
Phase resolution	16 bits
Amplitude scaling	12-bit digital control

Integration & Environment

Control interface	USB 2.0 and UART
Mounting	Flanged aluminium enclosure
Power supply	12 VDC / 1 A
Operating temperature	-10 to +60°C

OEM integration, automated test equipment and production fixtures

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RF SIGNAL GENERATION

DRA-RF1000-IND

Dual-channel DDS RF Generator

Features:

- Two independently programmable RF outputs
- 100 kHz to 1 GHz coverage per channel
- Two AD9915 cores with common reference
- Synchronized frequency and phase control
- USB and LAN for automated measurements



DRA-RF1000-DUAL

RF Performance

Frequency range	100 kHz - 1 GHz per channel
RF channels	2 independent 50 ohm outputs
Output level	-60 to +10 dBm per channel
Frequency setting	1 Hz resolution
DDS engines	2 x AD9915, 2.5 GSPS each

Synchronization & Control

Phase control	Independent 16-bit phase setting
Clocking	Common clock, multichip sync
Signal modes	CW, AM, FM, FSK and sweep
Profiles	8 programmable profiles / channel

Interface & Environment

Reference input	10 MHz external reference
Control interface	USB 2.0, LAN and trigger I/O
Power supply	12 VDC / 3 A
Operating temperature	0 to +50°C

Two-tone tests, synchronized RF experiments and receiver evaluation

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RF SIGNAL GENERATION

DRA-RF1000-DUAL

VHF/UHF Hobby Walkie-Talkie

Features:

- VHF 136–174 MHz and UHF 400–433 MHz
- Selectable 5 W / 1 W RF transmit power
- Analog FM with 128 memory channels
- CTCSS/DCS, scan and adjustable squelch
- Rechargeable battery with USB-C charging



DRA-HT5

Radio Performance

Frequency range	136–174 MHz / 400–433 MHz
Maximum frequency	433 MHz
Transmit power	5 W high / 1 W low
Channel spacing	12.5 kHz / 25 kHz
Receiver sensitivity	–121 dBm at 12 dB SINAD, typical

Operation & Audio

Modulation	Analog FM, F3E
Memory channels	128 programmable channels
Tone signalling	CTCSS and DCS
Audio output	500 mW speaker output

Battery & Environment

Battery	7.4 V / 2200 mAh Li-ion
Typical operating time	10 hours at 5/5/90 duty cycle
Charging input	USB-C, 5 VDC / 2 A
Operating temperature	–10 to +50°C

Hobby radio experiments, workshop communication and VHF/UHF learning

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HOBBY RADIO COMMUNICATION

DRA-HT5