

RDX-7708 and RDC-7708

Weather Radar Test Set

Comprehensive RF Test Set for ARINC 708 Solid State Coherent Weather Radar Systems



- **Endorsed by OEM Weather Radar System manufacturers**
- **Built-in Doppler shift**
- **Digital readout of output frequency or PRF**
- **Digital readout of transmitter power PRF controlled manually, or by transmitter or external sync input**
- **Pulse width manually controlled, equal to transmitter input or 270 microseconds (fixed)**

IFR is a leader in the design, manufacture and marketing of Avionics test systems.

The RDX-7708 or RDC-7708 test sets provide an RF source and monitor for complete RF testing of ARINC 708 T/R (Transmitter/Receiver) units including wind shear variants.

The RDX-7708 has three variants accommodating the Radar T/R supplied VHF reference frequencies for the Rockwell Collins or Honeywell (Allied Signal) 'X' band radar systems. A dual reference frequency variant is also available. The RDC-7708R is a special variant for testing the Rockwell Collins 'C' Band radar system.

Transmitter Power measurement is via a waveguide mounted RF power module. This method minimizes measurement errors due to RF coaxial cable loss variations.

Additional Features

- Range reply selectable in 1 μ s or 1 mile increments
- RF output adjustable in 1 dBm increments to -127 dBm
- Contour boost in 0.1 dB increments to +20 dB
- Built-in variance modulator

All the above features can be remotely controlled through the IEEE 488-1978 GPIB versions.

- Monitor outputs for detector, spectrum analyzer and sync

Specifications

RDX-7708R, BRW or RDC-7708R

Reference RF Input

Rockwell Collins X Band

152.777 MHz

Rockwell Collins C Band

146.666 MHz

Allied Signal X Band

78.6616 MHz

RF Output (Reference or Variable)

FREQUENCY

RDX-7708 Range

9295 to 9425 MHz

RDC-7708 Range

5350 to 5470 MHz

OUTPUT LEVELS

Range

-50 to -127 dBm in 1 dB steps (at 20 dB coupler output)

Accuracy

± 2 dB over frequency and attenuation range

CONTOUR BOOST

Range

0 to 19.9 dB for RF outputs ≤ -70 dBm

DOPPLER OFFSET

Range

0 to +29 kHz

Resolution

1 kHz

RF ON/OFF Ratio

70 dB or greater

Pulse Modulation

INTERNAL PRF GENERATOR

Range

0 to 9999 pps

Resolution

1 Hz

OUTPUT PULSE WIDTH

Range

0 to 99 ms and 270 μ s (fixed)

Resolution

0.1 μ s

RETURN DELAY

Range

1 to 999 μ s or NM

Resolution

1 unit

Displays

FREQUENCY COUNTER

Accuracy

± 3 kHz

Resolution

1 kHz

PEAK POWER INDICATOR

Range

RDX-7708 - 40 to 250 W

RDC-7708 - 80 to 500 W

Accuracy

-0.6 dB

Resolution

1 W

Versions and Accessories

When ordering please quote the full ordering number information.

Ordering Numbers

Selection Information

RDC-7708R	Rockwell Collins C band
RDX-7708BRW	Allied Signal X band
RDX-7708CRW	Dual reference Rockwell Collins X band and Allied Signal X band
RDX-7708R	Rockwell Collins X band

Versions

RDXR	RDX-7708R Weather Radar Bench Test (152.777 MHz/GPIB)
RDXBRW	RDX-7708BRW Weather Radar Bench Test (78.6616 MHz)
RDXCRW	RDX-7708CRW Weather Radar Bench Test (152.777 MHz & 78.6616 MHz/GPIB)
RDCR	RDC-7708R Weather Radar Bench Test (146.666 MHz/GPIB)

Accessories (Supplied)

- Line Cord
- Microwave Coaxial Cable
- BNC to BNC Coaxial Cable (Video Detector)
- RF Power Module
- 20 dB Attenuator (RDX-7708 only)

General

Dimensions

427 mm wide, 178 mm high, 467 mm deep

16.8 in. wide, 7 in. high, 18.4 in. deep

Weight

RDX-7708 or RDC-7708 - 15 kg (33 lbs.)

Power Requirements

RDX-7708 or RDC-7708 110/220 VAC, 50-400 Hz

Power Consumption

100 W



IFR - "Working together to create solutions for the world of communications."

IFR is a world leader in developing leading edge test and measurement equipment. The priority at IFR is to understand your communications test needs and respond to them. IFR has the flexibility and expertise to create just the right test solution for you. We understand that just as you are the expert in designing wireless products, we are expert in wireless test.

Combining the quality of our test products with their reliability, excellent price/performance ratio and minimal requirements for maintenance, every IFR test system represents an outstanding lifetime value.

IFR - "Working together with our customers to be flexible and innovative in providing effective test solutions for the rapid design, manufacture and maintenance of communications systems."

The added value IFR includes with each and every test set we sell will make you more productive. We offer a two-year standard warranty on all products and we will continue to support your product for five years beyond its final production. Our outstanding Customer Service Department offers calibration, out-of warranty repairs and consulting. Our Sales and Training Departments offer clear and concise product information with realistic performance specifications, technology training and application training. Our experienced engineers will help you develop application software and through continuous improvement programs, upgrades are always available.

IFR will continue to build upon our technology resources with an aggressive commitment that will enable you to excel in some of the world's most dynamic, high growth markets.

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