

# Avionics

## RDX-7708 Weather Radar Test Set

**AEROFLEX**  
A passion for performance.



### 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)

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

*The RDX-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.*

*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  $\mu$ 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**

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#### **RDX-7708R, BRW**

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#### **REFERENCE RF INPUT**

152.777 MHz

78.6616 MHz

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#### **RF OUTPUT (REFERENCE OR VARIABLE)**

##### **FREQUENCY**

##### **RDX-7708 Range**

9295 to 9425 MHz

##### **OUTPUT LEVELS**

##### **Range**

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

##### **Accuracy**

$\pm 2$  dB over frequency and attenuation range

For the very latest specifications visit [www.aeroflex.com](http://www.aeroflex.com)

## CONTOUR BOOST

### Range

0 to 19.9 dB for RF outputs  $\leq$  -70 dBm

## DOPPLER OFFSET

### Range

0 to +29 kHz

### Resolution

1 kHz

### RF ON/OFF Ratio

70 dB or greater

## PULSE MODULATION

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### INTERNAL PRF GENERATOR

### Range

0 to 9999 pps

### Resolution

1 Hz

### OUTPUT PULSE WIDTH

### Range

0 to 99 ms and 270  $\mu$ s (fixed)

### Resolution

0.1  $\mu$ s

### RETURN DELAY

### Range

1 to 999  $\mu$ s or NM

### Resolution

1 unit

## DISPLAYS

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### FREQUENCY COUNTER

### Accuracy

$\pm$ 3 kHz

### Resolution

1 kHz

### PEAK POWER INDICATOR

### Range

RDX-7708 - 40 to 250 W

### Accuracy

-0.6 dB

### Resolution

1 W

## GENERAL

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### Dimensions

427 mm wide, 178 mm high, 467 mm deep

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

### Weight

RDX-7708 - 15 kg (33 lbs.)

### Power Requirements

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

### Power Consumption

100 W

## VERSIONS AND ACCESSORIES

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When ordering please quote the full ordering number information.

### Ordering Numbers

#### Selection Information

RDX-7708BRW X band

RDX-7708CRW Dual reference

#### Versions

RDXR RDX-7708R Weather Radar Bench Test (152.777 MHz/GPIB)

RDXBRW RDX-7708BRW Weather Radar Bench Test (78.6616 MHz)

#### Accessories (Supplied)

Line Cord

Microwave Coaxial Cable

BNC to BNC Coaxial Cable (Video Detector)

RF Power Module

20 dB Attenuator (RDX-7708 only)

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