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Data Sheet

August 1, 2026

IFR AEROFLEX

IFR Aeroflex DF-7708 Interface for Weather Radar Systems

The IFR Aeroflex DF-7708 is an interface unit designed for seamless integration of weather radar systems. It facilitates data transfer and control functions, ensuring accurate and reliable weather information display. Ideal for aviation and meteorology applications.



MODEL

IFR Aeroflex DF-7708

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

DF-7708

LISTING

<https://aumictechlabs.com/products/df-7708-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The IFR Aeroflex DF-7708 is a test interface matrix that bridges test systems and ARINC 708 weather radar units under test. It manages all non-RF interfaces - power distribution, discrete signal control, analog voltage sourcing, and data bus routing - according to ARINC-708 specifications. The unit integrates with WRX and WRC-7708 weather radar test systems and operates under control of a 24-line by 80-character CRT monitor and hex keypad, presenting all functions in ARINC-708 terminology.

Technical Specifications

- Four programmable ARINC-708 control bus outputs with independent data and transmission rate control
- Two attitude bus outputs (onside and offside) with independent programmable parameters
- Three ARINC-708 data bus outputs with four selectable patterns: X/Y crosshatch, bar, arc, and sector
- Six programmable high-speed and low-speed I/O buses
- Low Speed Bit Rate: 12.6 kHz
- High Speed Bit Rate: 100 kHz

Data Bus Bit Rate: 1 MHz Control and data bus message transmission rate: 0 to 255 messages per second in 1 message per second increments Selected display capability for one of four input control buses and one of three input data buses

Key Features

- Sources analog three-wire and two-wire voltages to the unit under test
- Sources Johnson Code drive for Collins Antenna Pedestal
- Routes ARINC control buses, digital attitude buses, and data buses to appropriate UUT connector pins
- Controls and monitors all discrete signals per ARINC-708 specification
- Controls and monitors UUT power distribution
- Front panel test points for signal monitoring on all UUT connector pins
- Unique interface cables provided for each UUT type

Typical Applications

Weather radar system development, integration testing, and production validation in aviation platforms requiring ARINC 708 compliance.

Compatibility & Integration

Designed for use with WRX and WRC-7708 weather radar test systems. Compatible with Rockwell Collins weather radar systems when used with the STD-7000A digital controller and RDX-7708R/RDX-7708BRW equipment.

Features & description

From manufacturer datasheet

Features

- All interfaces except RF between the WRX/WRC-7708 test system and the UUT
- Unique interconnect cable set per UUT type
- Controls and monitors UUT power
- Controls and monitors discrete signals per ARINC-708
- Sources analog three-wire and two-wire voltages to the UUT
- Sources Johnson Code drive for Collins antenna pedestal
- Front-panel test points to monitor all signals on the UUT connector
- Routes ARINC control buses, digital attitude buses, and data buses to correct UUT connector pins
- Works with STD-7000A (ARINC-429 / ARINC-453 generation and monitoring) and RDX/RDC RF stimulus

DF7708 Characteristics / Specifications

PARAMETER	VALUE
Model	DF-7708
Manufacturer	IFR / Aeroflex (VIAVI lineage)
Instrument Type	Weather radar UUT discrete / interface matrix
System Role	Non-RF interface element of WRX-7708 / WRC-7708 weather radar test set
Companion Units	STD-7000A digital controller; RDX-7708R / RDX-7708BRW / RDX-7708CRW or RDC-7708R RF stimulus; CRT terminal and keypad
Weight	approximately 9.1 kg (20 lb)
Power	110 VAC, 50-400 Hz (220 V, 50-400 Hz available on request); system power consumption figures published for the RF units are about 100 W class
Accessories (typical system)	line cord; STD-7000A to DF-7708 interconnect cable; R/T unit cable; control unit cable System Context (WRX / WRC-7708)
RF stimulus examples	Rockwell Collins X-band IF 152.777 MHz; Rockwell Collins C-band 146.666 MHz; AlliedSignal X-band 78.6616 MHz. RDX-7708 RF range approximately 9295 to 9425 MHz; RDC-7708 approximately 5350 to 5470 MHz. Analog pitch/roll outputs include three-wire and two-wire voltages at discrete angles (0, +/-5 to +/-30 degrees class) with about +/-0.1 degree accuracy in the system brochure.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications

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Dimensions (DF-7708 family units in system brochure): approximately 427 mm (16.8 in) W x 178 mm (7 in) H x 467 mm (18.4 in) D

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Standard Operating Conditions
Use only with the matching UUT cable and the companion STD-7000A / RDX or RDC units for a complete station. Observe aircraft avionics grounding and interlock practices.

Operational Notes
The DF-7708 alone does not provide RF stimulus; RF testing requires the RDX or RDC unit. Confirm cable kit and UUT type (Collins vs AlliedSignal) before quoting a complete WRX/WRC configuration.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.