

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 12, 2026

IFR AEROFLEX

IFR Aeroflex STD-7000 ARINC Bus Controller

The IFR Aeroflex STD-7000 is an ARINC bus controller designed for testing and simulating ARINC 429 data buses. It provides comprehensive control and analysis capabilities for avionics systems development and maintenance.



MODEL

IFR Aeroflex STD-7000

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

STD-7000

LISTING

<https://aumictechlabs.com/products/std-7000-4/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The IFR Aeroflex STD-7000 ARINC Bus Controller is a programmable device that generates, receives, and monitors ARINC 429 and ARINC 453 bus traffic for avionics test applications. Part of the Standard Digital Interface System (SDIS), the STD-7000 works with an Operator Terminal to simulate bus conditions, validate system responses, and verify data integrity through real-time CRT display and analysis. It is the central control element for ARINC 700 series test configurations, interfacing with Units Under Test through discrete signal monitoring and bus command activation.

Technical Specifications

- Six programmable high/low speed ARINC 429 I/O buses
- Three programmable very high speed ARINC 453 I/O buses
- One IFR I/O bus for auxiliary test equipment interface
- One IEEE Standard 488-1978 (GPIB) bus for external ATE Controller integration
- One EIA RS232C bus for Operator Terminal interface
- CRT display with dedicated CRT interface
- 16-key numeric keypad for operator input

Key Features

- Programmable control of serial bus communications across ARINC 700 series avionics systems
- Simultaneous generation and

reception of ARINC 429/453 data Real-time data display enabling rapid system integrity verification Discrete signal monitoring for Unit Under Test performance assessment Modular architecture with dedicated Bus Logic Input, Bus Analog Input, ARINC 429 Bus Output, VHS Output, CPU, I/O, EPROM, and RAM memory boards Typical Applications Commercial aircraft avionics equipment testing and validation ARINC bus protocol compliance verification Discrete control and monitoring of avionics subsystems Integration with automated test environments via GPIB interface Compatibility & Integration The STD-7000 supports ARINC 429 (twisted pair balanced differential signaling) and ARINC 453 Very High Speed Bus standards. ARINC 453 originally served as a general-purpose data bus in weather radar products including ARINC 708 and 708A implementations. IEEE 488-1978 connectivity enables seamless operation within larger automatic test equipment systems.

Features & description

From manufacturer datasheet

Technical Specifications

Six programmable high/low speed ARINC 429 I/O buses Three programmable very high speed ARINC 453 I/O buses One IFR I/O bus for auxiliary test equipment interface One IEEE Standard 488-1978 (GPIB) bus for external ATE Controller integration One EIA RS232C bus for Operator Terminal interface CRT display with dedicated CRT interface 16-key numeric keypad for operator input

Key Features

Programmable control of serial bus communications across ARINC 700 series avionics systems Simultaneous generation and reception of ARINC 429/453 data Real-time data display enabling rapid system integrity verification Discrete signal monitoring for Unit Under Test performance assessment Modular architecture with dedicated Bus Logic Input, Bus Analog Input, ARINC 429 Bus Output, VHS Output, CPU, I/O, EPROM, and RAM memory boards

IFR Aeroflex STD-7000 — Repair & Calibration Service

Aumictech offers NIST-traceable calibration and repair for the IFR Aeroflex STD-7000. Calibration covers analog input channel accuracy and offset at all gain settings, analog output accuracy, digital I/O logic threshold verification, sample rate and timing accuracy, and trigger and synchronization bus functional verification. NI CompactRIO and PXI chassis also undergo backplane trigger line integrity check.. All calibrations ship with a NIST-traceable certificate. Turnaround is typically 1–3 business days after receipt. Standard Cal Pass/fail cert + NIST sticker Cal with Data Full NIST cert with measured values Common IFR Aeroflex STD-7000 faults: power supply failure (cRIO-9073/9074), C-series slot connector wear, PXI chassis fan failure, GPIB interface failure on VXI controllers, BIOS/EEPROM corruption. NI CompactRIO most common faults are power supply failure on older cRIO-9073/9074 chassis and C-series module slot connector wear from repeated hot-swap cycles. PXI chassis fan failure is the most common wear item — chassis fans are field-replaceable. VXI embedded controllers most commonly develop EEPROM corruption and GPIB interface failure. [Request Calibration](#) → [Request Repair Quote](#) →

IFR Aeroflex STD-7000 price

This IFR Aeroflex STD-7000 is listed at . Calibration is available separately from . Contact us for volume pricing or if you need multiple units.

IFR Aeroflex STD-7000 calibration cost

NIST-traceable calibration for the IFR Aeroflex STD-7000 is (standard — pass/fail certificate and calibration sticker) or (full measured data at every test point, reference standards documented, traceability chain included). Calibration for this instrument covers analog input channel accuracy and offset at all gain settings, analog output accuracy, digital I/O logic threshold verification, sample rate

and timing accuracy, and trigger and synchronization bus functional verification. NI CompactRIO and PXI chassis also undergo backplane trigger line integrity check.. Turnaround is 1 to 3 business days after receipt. See full calibration details →

Applications

Commercial aircraft avionics equipment testing and validation ARINC bus protocol compliance verification Discrete control and monitoring of avionics subsystems Integration with automated test environments via GPIB interface Compatibility & Integration The STD-7000 supports ARINC 429 (twisted pair balanced differential signaling) and ARINC 453 Very High Speed Bus standards. ARINC 453 originally served as a general-purpose data bus in weather radar products including ARINC 708 and 708A implementations. IEEE 488-1978 connectivity enables seamless operation within larger automatic test equipment systems.

Unit notes

The IFR Aeroflex STD-7000 ARINC Bus Controller is a programmable device that generates, receives, and monitors ARINC 429 and ARINC 453 bus traffic for avionics test applications. Part of the Standard Digital Interface System (SDIS), the STD-7000 works with an Operator Terminal to simulate bus conditions, validate system responses, and verify data integrity through real-time CRT display and analysis. It is the central control element for ARINC 700 series test configurations, interfacing with Units Under Test through discrete signal monitoring and bus command activation.

Technical Specifications

- Six programmable high/low speed ARINC 429 I/O buses
- Three programmable very high speed ARINC 453 I/O buses
- One IFR I/O bus for auxiliary test equipment interface
- One IEEE Standard 488-1978 (GPIB) bus for external ATE Controller integration
- One EIA RS232C bus for Operator Terminal interface
- CRT display with dedicated CRT interface
- 16-key numeric keypad for operator input

Key Features

- Programmable control of serial bus communications across ARINC 700 series avionics systems
- Simultaneous generation and reception of ARINC 429/453 data
- Real-time data display enabling rapid system integrity verification
- Discrete signal monitoring for Unit Under Test performance assessment
- Modular architecture with dedicated Bus Logic Input, Bus Analog Input, ARINC 429 Bus Output, VHS Output, CPU, I/O, EPROM, and RAM memory boards

Typical Applications

- Commercial aircraft avionics equipment testing and validation

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.

The IFR Aeroflex STD-7000 is an ARINC bus controller designed for testing and simulating ARINC 429 data buses. It provides comprehensive control and analysis capabilities for avionics systems development and maintenance.

The IFR Aeroflex STD-7000 ARINC Bus Controller is a programmable device that generates, receives, and monitors ARINC 429 and ARINC 453 bus traffic for avionics test applications. Part of the Standard Digital Interface System (SDIS), the STD-7000 works with an Operator Terminal to simulate bus conditions, validate system responses, and verify data integrity through real-time CRT display and analysis. It is the central control element for ARINC 700 series test configurations, interfacing with Units Under Test through discrete signal monitoring and bus command activation.

Compatibility & Integration The STD-7000 supports ARINC 429 (twisted pair balanced differential signaling) and ARINC 453 Very High Speed Bus standards. ARINC 453 originally served as a general-purpose data bus in weather radar products including ARINC 708 and 708A implementations. IEEE 488-1978 connectivity enables seamless operation within larger automatic test equipment systems.

Aumictech offers NIST-traceable calibration and repair for the IFR Aeroflex STD-7000. Calibration covers analog input channel accuracy and offset at all gain settings, analog output accuracy, digital I/O logic threshold verification, sample rate and timing accuracy, and trigger and synchronization bus functional verification. NI CompactRIO and PXI chassis also undergo backplane trigger line integrity check.. All calibrations ship with a NIST-traceable certificate. Turnaround is typically 1-3 business days after receipt.

Technical Specifications

Six programmable high/low speed ARINC 429 I/O buses Three programmable very high speed ARINC 453 I/O buses One IFR I/O bus for auxiliary test equipment interface One IEEE Standard 488-1978 (GPIB) bus for external ATE Controller integration One EIA RS232C bus for Operator Terminal interface CRT display with dedicated CRT interface 16-key numeric keypad for operator input

Key Features

Programmable control of serial bus communications across ARINC 700 series avionics systems Simultaneous generation and reception of ARINC 429/453 data Real-time data display enabling rapid system integrity verification Discrete signal monitoring for Unit Under Test performance assessment Modular architecture with dedicated Bus Logic Input, Bus Analog Input, ARINC 429 Bus Output, VHS Output, CPU, I/O, EPROM, and RAM memory boards

IFR Aeroflex STD-7000 – Repair & Calibration Service

Aumictech offers NIST-traceable calibration and repair for the IFR Aeroflex STD-7000. Calibration covers analog input channel accuracy and offset at all gain settings, analog output accuracy, digital I/O logic threshold verification, sample rate and timing accuracy, and trigger and synchronization bus functional verification. NI CompactRIO and PXI chassis also undergo backplane trigger line integrity check.. All calibrations ship with a NIST-traceable certificate. Turnaround is typically 1-3 business days after receipt.

Standard Cal Pass/fail cert + NIST sticker Cal with Data Full NIST cert with measured values

Common IFR Aeroflex STD-7000 faults: power supply failure (cRIO-9073/9074), C-series slot connector wear, PXI chassis fan failure, GPIB interface failure on VXI controllers, BIOS/EEPROM corruption. NI CompactRIO most common faults are power supply failure on older cRIO-9073/9074 chassis and C-series module slot connector wear from repeated hot-swap cycles. PXI chassis fan failure is the most common wear item – chassis fans are field-replaceable. VXI embedded controllers most commonly develop EEPROM corruption and GPIB interface failure.

[Request Calibration](#) → [Request Repair Quote](#) →

IFR Aeroflex STD-7000 price

This IFR Aeroflex STD-7000 is listed at . Calibration is available separately from . Contact us for volume pricing or if you need multiple units.

IFR Aeroflex STD-7000 calibration cost

NIST-traceable calibration for the IFR Aeroflex STD-7000 is (standard – pass/fail certificate and calibration sticker) or (full measured data at every test point, reference standards documented, traceability chain included). Calibration for this instrument covers analog input channel accuracy and offset at all gain settings, analog output accuracy, digital I/O logic threshold verification, sample rate and timing accuracy, and trigger and synchronization bus functional verification. NI CompactRIO and PXI chassis also undergo

backplane trigger line integrity check.. Turnaround is 1 to 3 business days after receipt. See full calibration details →

Applications

Commercial aircraft avionics equipment testing and validation ARINC bus protocol compliance verification
Discrete control and monitoring of avionics subsystems Integration with automated test environments via GPIB interface

Compatibility & Integration The STD-7000 supports ARINC 429 (twisted pair balanced differential signaling) and ARINC 453 Very High Speed Bus standards. ARINC 453 originally served as a general-purpose data bus in weather radar products including ARINC 708 and 708A implementations. IEEE 488-1978 connectivity enables seamless operation within larger automatic test equipment systems.

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

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 12, 2026

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