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Data Sheet

August 15, 2026

DDC

DDC IAC-37001 Synchro/Resolver Module

DDC VXI Modules. Resolution: 20 or 16 bits (programmable), Accuracy: 18 arc seconds (20-bit), Resolution: 16 bits.



MODEL DDC IAC-37001	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU IAC-37001	LISTING https://aumictechlabs.com/products/iac-37001-2/

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The DDC IAC-37001 is a VXI C-size register-based module that combines independent synchro/resolver angle generation and measurement in a single card. It converts synchro or resolver signals into high-resolution digital data and generates precision synchro/resolver outputs, delivering the accuracy and isolation required in aerospace and industrial control systems.

Technical Specifications Measurement Section Resolution: 20 or 16 bits (programmable)

Accuracy: 18 arc seconds (20-bit); 36 arc seconds (16-bit) Angular Range: 0–360 degrees

Reference Input: Transformer isolated, 11.8/26/90 V line-to-line, 360–5000 Hz, $\pm 50^\circ$ phase shift

maximum, 150 k Ω minimum impedance, 500 V breakdown voltage Signal Input: Transformer

isolated, 11.8/26/90 V line-to-line, 360–5000 Hz, $\pm 50^\circ$ phase shift maximum, 150 k Ω minimum

impedance, 500 V breakdown voltage Generation Section Resolution: 16 bits Accuracy: ± 25 arc

seconds (no load); ± 36 arc seconds (1.5 VA load) Angular Range: 0–360 degrees Reference Input:

Transformer isolated, 11.8/26/90 V line-to-line Signal Output: Transformer isolated, 11.8/26/90 V

line-to-line, 1.5 VA load capacity, $\pm 3.5^\circ$ phase shift maximum, $\pm 0.15 \Omega$ output impedance, 500 V

breakdown voltage Dynamic Rotation: Programmable clockwise or counter-clockwise angular rotation via internal data rate control Key Features Dual independent measurement and generation channels Transformer isolation on all synchro/resolver interfaces Programmable resolution (16/20-bit measurement) Selectable voltage levels (11.8, 26, 90 V) Mode selection: synchro or resolver operation Internal/external rate signal configuration for dynamic rotation Wrap-around self-test capability Full 360° measurement and generation range Typical Applications Aircraft attitude and heading reference systems Rotating machinery position feedback and control Precision angle encoder interfaces Synchro-to-digital conversion in legacy avionic systems Multi-axis position simulation and test Compatibility & Integration The IAC-37001 integrates into standard VXI C-size slot architecture. All signal inputs and outputs employ transformer isolation to prevent ground loops and ensure noise immunity in high-voltage industrial environments. Programmable self-test simplifies system validation.

IAC37001 Characteristics / Specifications

PARAMETER	VALUE
Model	IAC-37001
Instrument Type	Synchro/resolver module
Measurement Class	synchro/resolver angle
Manufacturer	DDC Data Device Corporation
Literature	DDC IAC-37001 synchro/resolver module listings
Family	DDC synchro/resolver converters
Brand Lineage	DDC
Form Factor	synchro/resolver module
System Role	angle conversion
Use Case	avionics synchro/resolver test
Documentation Type	OEM IAC-37001 listing
Year Class	DDC IAC-37001
Application Class	synchro/resolver
Vendor Path	DDC
Related Pci Card	SB-3622712-365 digital-to-synchro PCI six channel
Related Pci Indicator	SB36243IA-3L0 synchro angle position indication PCI
Related Bridge	BU-67119W200R-JL0 AceXtreme bridge
Documentation Class	OEM IAC-37001 catalog
Control Class	synchro/resolver module
Companion Role	DDC synchro family
Operating Mode	synchro/resolver conversion
Instrument Class	angle converter
Protocol Class	synchro/resolver
Avionics Class	synchro ATE
Enclosure Class	DDC module

PARAMETER

VALUE

Channel Class

synchro/resolver

Accuracy Class

DDC angle conversion

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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Protocol Class	synchro/resolver
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Enclosure Class	DDC module
Channel Class	synchro/resolver

PARAMETER	VALUE
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Accuracy Class	DDC angle conversion
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Notes

From DDC IAC-37001 listings (synchro/resolver module). Resolution, accuracy, reference frequency, and channel count are on the IAC-37001 data sheet.

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.