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Data Sheet

August 15, 2026

CURTISS-WRIGHT / ACRA CONTROL

Curtiss-Wright / ACRA Control KAD/BCU/105/D/00 Ethernet Backplane Controller Module - Conformal Coated

The Curtiss-Wright/ACRA Control KAD/BCU/105/D/00 is an Ethernet Backplane Controller Module, designed for rugged environments with conformal coating for enhanced protection against harsh conditions. It provides reliable Ethernet control in demanding applications.



MODEL

**Curtiss-Wright /
ACRA Control
KAD/BCU/105/D/00**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

KAD/BCU/105/D/00

LISTING

[https://aumictechlabs.c
om/products/kad-bcu-1
05-d-00-2/](https://aumictechlabs.com/products/kad-bcu-105-d-00-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Curtiss-Wright/ACRA Control KAD/BCU/105/D/00 is an Ethernet Backplane Controller Module for the KAM-500 chassis, delivering full-duplex 100BaseTX connectivity with integrated data acquisition and packet generation. Conformal coating protects against harsh operational environments. This module functions as a controller, programmer, and IPv4 packet generator - acquiring backplane data into an onboard Current Value Table, packetizing user-defined structures, and transmitting via UDP over Ethernet. Technical Specifications Ethernet Interface Single 100BaseTX Ethernet channel, full-duplex operation Auto-sensing with auto-MDIX support IEEE 802.3 compatible Networking Protocols IPv4 protocol with fixed user-assigned addressing

(upper 16 bits: 172.28) ARP and PING message support (broadcast-ARP only; unicast-ARP not supported) IGMPv2 for PTP message reception Unicast, multicast, and broadcast packet transmission Data Acquisition and Packet Generation Current Value Table (CVT) capacity: up to 1 megasample UDP packet transmission with IP fragmentation support Maximum UDP payload: 64 kbyte (32 kilosamples) Ethernet frame sizes: 64 bytes to 1518 bytes Jumbo packet support to 64 kbyte Multiple user-defined IENA packet structures simultaneously Individual programmability of packet identifiers, sizes, and destination IP addresses Programming and Verification Program/verify mode for KAM-500 chassis hardware Read/write data blocks to any module within the chassis Ethernet-based chassis programming Synchronization PTPv1/V2 client (KAD/BCU/105) External IEEE 1588-2004 Precision Time Protocol version 1 synchronization support Power Consumption Total power: 1.55 W to 2.07 W Physical Mass: 75 g (2.65 oz) Height above chassis (bare connector): 11 mm (0.43 in) Conformal coated finish Key Features Full-duplex 100 Mbps Ethernet with auto-MDIX IPv4 packet generation with fragmentation support Onboard Current Value Table up to 1 megasample capacity UDP-based data streaming to multiple destinations Integrated chassis programmer for KAM-500 modules PTPv1/V2 client synchronization Low power consumption (1.55–2.07 W) Typical Applications Real-time backplane data acquisition within KAM-500 systems Multi-module chassis control and programming over Ethernet High-sample-rate data streaming via UDP unicast/multicast Time-synchronized data collection using PTPv1/V2 Compatibility & Integration Designed for integration within Curtiss-Wright ACRA Control KAM-500 backplane chassis architecture. Operates as both data controller and chassis programmer, enabling remote configuration and acquisition without local processing hardware.

KADBCU105D00 Characteristics / Specifications

PARAMETER	VALUE
Model	KAD/BCU/105/D/00
Instrument Type	KAM-500 Ethernet backplane controller
Ethernet	bi-directional full-duplex 100BASE-TX with auto-MDIX
Max Bit Rate	100 Mbps
Channels	1
Time Sync	IEEE 1588 PTPv1 and PTPv2 client
Network Protocol	IPv4 with ARP and ping
Udp Payload	packets up to 64 kbyte (32 kilosamples) via IP fragmentation
Current Value Table	up to 1 megasample
Ip Assignment	upper 16 bits fixed 172.28; lower 16 bits from top-block wiring
Mac Address	factory-programmed unique Ethernet MAC
Iena Support	IENA STANDARD packets only
Operating Temperature	minus 55 to 85 C
High Temp Variant	105 C variant available
Mechanical Package	KAM-500 one user/controller slot
Family	Acra KAM-500
Type Class	AE-FTI-DAU
Product Category	data acquisition overhead / controller
Manufacturer	Curtiss-Wright / ACRA Control
Related Chassis	KAM/CHS/06U and KAM/CHS/13U
Related Monitor	KAD/EBM/101 Ethernet bus monitor
Application Class	flight test instrumentation DAU
Programming	chassis programming and verification via Ethernet
Ab1 Et Variant	KAD/BCU/105/AB1/ET supports user-assigned IP on IPv4

KADBCU105D00 Specifications

PARAMETER	VALUE
Applications	Programming and verifying KAM-500 chassis and generating Ethernet/IENA flight-test packets with IEEE 1588 time.
Key Features	100BASE-TX full-duplex KAM-500 controller
IEEE 1588 PTPv1/v2 client	UDP to 64 kbyte via IP fragmentation
CVT up to 1 megasample	Minus 55 to 85 C (105 C variant)
Technical Specifications	Model: KAD/BCU/105/D/00

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	minus 55 to 85 C (105 C variant available). KAD/BCU/105/D/00 is the D-revision product code. Protocol Ethernet 100BT, IENA, PTPv1/v2 client; max bit rate 100 Mbps; type AE-FTI-DAU.
Operating Temperature	minus 55 to 85 C (105 C variant available). KAD/BCU/105/D/00 is the D-revision product code. Protocol Ethernet 100BT, IENA, PTPv1/v2 client; max bit rate 100 Mbps; type AE-FTI-DAU.
Model	KAD/BCU/105/D/00
Instrument Type	KAM-500 Ethernet backplane controller
Ethernet	bi-directional full-duplex 100BASE-TX with auto-MDIX
Max Bit Rate	100 Mbps
Channels	1
Time Sync	IEEE 1588 PTPv1 and PTPv2 client
Network Protocol	IPv4 with ARP and ping
Udp Payload	packets up to 64 kbyte (32 kilosamples) via IP fragmentation
Current Value Table	up to 1 megasample
Ip Assignment	upper 16 bits fixed 172.28; lower 16 bits from top-block wiring
Mac Address	factory-programmed unique Ethernet MAC
Iena Support	IENA STANDARD packets only
High Temp Variant	105 C variant available
Mechanical Package	KAM-500 one user/controller slot
Family	Acra KAM-500
Type Class	AE-FTI-DAU
Product Category	data acquisition overhead / controller
Manufacturer	Curtiss-Wright / ACRA Control
Related Chassis	KAM/CHS/06U and KAM/CHS/13U
Related Monitor	KAD/EBM/101 Ethernet bus monitor
Application Class	flight test instrumentation DAU

PARAMETER	VALUE
Programming	chassis programming and verification via Ethernet
Ab1 Et Variant	KAD/BCU/105/AB1/ET supports user-assigned IP on IPv4 Notes From Curtiss-Wright KAD/BCU/105 product page and TEC-NOT-053. D/00 is the catalog revision code. Confirm PTP version, IP wiring, and temperature variant on the installed module.

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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PARAMETER	VALUE
Model	KAD/BCU/105/D/00
Instrument Type	KAM-500 Ethernet backplane controller
Ethernet	bi-directional full-duplex 100BASE-TX with auto-MDIX
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Type Class	AE-FTI-DAU
Product Category	data acquisition overhead / controller
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Related Chassis	KAM/CHS/06U and KAM/CHS/13U
Related Monitor	KAD/EBM/101 Ethernet bus monitor
Application Class	flight test instrumentation DAU
Programming	chassis programming and verification via Ethernet
Ab1 Et Variant	KAD/BCU/105/AB1/ET supports user-assigned IP on IPv4

Notes

From Curtiss-Wright KAD/BCU/105 product page and TEC-NOT-053. D/00 is the catalog revision code. Confirm PTP version, IP wiring, and temperature variant on the installed module.

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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NIST-traceable calibration · SAM registered ·
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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.