

# CDU-7000



Today's platforms require enhanced capabilities in a smaller form factor. Our embedded mission processing is a critical resource for hosting flight management, communications, and situational awareness applications enabling mission success. Building upon the proven performance of the CDU-800 and CDU-900. the CDU-7000 is the latest addition to Rockwell Collins' CDU product family. The CDU-7000 incorporates the latest commercial technologies into a military-hardened package to achieve an unparalleled blend of performance and reliability. Based on Rockwell Collins' Flight2 open architecture, the CDU-7000 features a high-quality color active matrix liquid crystal display (AMLCD), Power PC processor, and 3U Compact PCI compatible circuit cards. The unit consolidates control of a diverse set of communications, navigation, weapons management and defensive aids equipment into a central point including the aircraft's flight management functions. The CDU-7000 features include a more powerful processor, ARINC 739 capability (essential to meet future

GATM requirements) and a high tactile feedback sealed, fluid-resistant keyboard for ease of operation in turbulent mission environments.

## FEATURES – PRODUCT HIGHLIGHTS

- > Power PC system processor
- > Power PC I/O processor
- > ARINC I/O processor
- > Dual MIL-STD-1553B processors
- > POSIX-compliant operating system
- > Compact PCI backplane
- > 3U form-factor circuit cards
- > ARINC 739 compatible
- > Glove compatible



#### DISPLAY

- Color active matrix LCD (3.45 x 3.45 in)
- > View angle: up to 45° horizontal
- > Luminance: 0.05 FL to 150 FL
- Dark ambient contrast ratio: >150:1
- > High ambient contrast ratio: >3:1 in 10,000 FL
- NVIS compatible

#### **KEYBOARD**

- > Full alphanumeric
- > 12 line-select keys
- > Generic function keys
- > Human factors design with high tactile feedback

## ELECTRICAL INTERFACES

- > Dual IEEE 802.3 Ethernet (10/100 BaseT selectable)
- > MIL-STD-1553B: dual/dual
- > ARINC 429: 12 input, 6 output (low/high speed)
- > RS-232: 2 input, 2 output
- > Discrete I/O: 19 input, 8 output (ground open)
- > ARINC-743A-2 GPS time mark input
- > Input power: 28 V dc, 70 W (maximum) with heater and fan
- > Keyboard lighting: 5 V ac, 5 V dc or 28 V dc
- > Operation through 100 msec power transient

#### RELIABILITY

- > Predicted MTBF of 5,000 hours
- > 15-minute MTTR
- Built-In Test (BIT)
  - 95% probability of fault detection
  - Power-on, continuous, and commanded BIT

#### PHYSICAL DESCRIPTION

Size Size with connector Weight Cooling 7.125 H x 5.75 W x 8.0 D in 7.125 H x 5.75 W x 9.320 D in 10.9 lbs maximum Natural convection and internal fan

## ENVIRONMENTAL CAPABILITIES

Temperature	-40°C to +55°C operating
	+71°C intermittent operation
Vibration	MIL-STD-810, Method 514.5
	(Helicopter)
Shock	MIL-STD-810, Method 516.5,
	20 g/11 ms
Sand/dust	MIL-STD-810, Method 510.4
Fungus	MIL-STD-810, Method 508.5
Salt atmosphere	MIL-STD-810, Method 509.4
Explosion proof	MIL-STD-810, Method 511.4
Waterproof	MIL-STD-810, Method 506.4
Humidity	MIL-STD-810, Method 520.2
Temperature shock	MIL-STD-810, Method 503.4
EMI	MIL-STD-461E (ADS-37A-PRF)
Lightning	DO-160D

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

## BUILDING TRUST EVERY DAY.

Rockwell Collins delivers smart communication and aviation electronics solutions to customers worldwide. Backed by a global network of service and support, we stand committed to putting technology and practical innovation to work for you whenever and wherever you need us. In this way, working together, we build trust. Every day.

### FOR MORE INFORMATION CONTACT:

Rockwell Collins 400 Collins Road NE Cedar Rapids, Iowa 52498 800.321.2223 319.295.5100 Fax: 319.295.4777 email: learnmore@rockwellcollins.com www.rockwellcollins.com/gs

