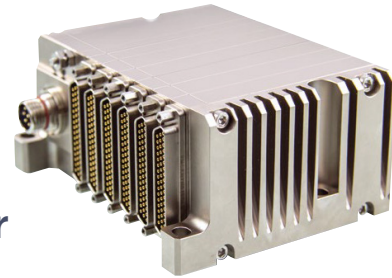




ACQUIRE & PROCESS RECORD TELEMETER & STREAM REPLAY

CMA CORE8 CMA CORE16

**Ruggedized Data Acquisition Unit for
Missile Testing and Rocket Telemetry**



MISSILE AND ROCKET TELEMETRY

With its small and highly ruggedized design, CMA is an ideal fit for data acquisitions in **harsh environments and demanding small space areas**. CMA has the smallest size per channel real estate available and offers **highly versatile acquisition modules** to easily tailor the instrumentation of each specific missile use case.

With the acquisition modules, **each channel type can be configured by software on the field**. On board processing, recording, hardware customization, GPS localization and built-in transmitter allows an all-in-one-box implementation.

CMA's offers **advanced signal and acquisition conditioning, bus monitoring** and also **recording and transmission** while reducing integration time, cost and risk.

With its OnBoard Processing module CMA can provide **pre-processing** of data on board and even **external system command** and control fully programmable by user.



Missiles



Rocket
Launcher



Sounding
Rocket

DESIGNED FOR HARSH ENVIRONMENT

High shocks, high vibration, EMI/EMC, -50/+105, waterproof, lightning

ULTRA COMPACT AND GENERIC

Generic analog module, 2x3" / 51x76 mm, from 1 to 16 modules per stack

BEST DATA EVER

1000 ppm in extreme temperature range

EASY TO CONFIGURE

eZ software suite, High Level Configuration

MULTI FORMAT OUTPUT STREAM

PCM Chapter 4, PCM Chapter 7, Low latency video, UDP output

PROCESS & COMMAND

Preprocess data and program commands to external systems

TECHNICAL SPECIFICATIONS

The CMA Core is the basic structure which receives the user modules for your acquisition, reconstruction and topology requirements.

Two core versions allow you to create:

- 1 Central Processing Unit
- 1 Power Supply + 1 Stack Cover (Core 8)
- 2 Power Supplies (Core 16)

MECHANICAL CHARACTERISTICS

CMA Core 8	
Dimensions	51 x 76 x (58.3 + n x 11) mm ; n=[1;8]
Weight	905 g typ. (with 3 modules)
Max. Power	65 W
CMA Core16	
Dimensions	51 x 76 x (84.6 + n x 11) mm ; n=[9;16]
Weight	2.1 kg typ. (with 12 modules)
Max. Power	130 W

INTERFACE

Power Supply	8 pin circular connector GLENAIR Series 801
CPU and Application modules	51 pin crimpable connectors, AWG 24, SOURIAU microComp

ENVIRONMENTAL CONDITIONS

Test Procedure

Temperature Operating	-45°C to +85°C
	MILSTD810G
Extended	-50°C to +105°C
Storage	-55°C to +105°C
	MILSTD810G (501.5, 502.5)
Variation	< 10°C/min (-45°C +85°C)
	MILSTD810G (503.5)
Humidity	+55°C / 95%HR
	DO160-G Cat.C
Altitude	70,000 ft
	DO160-G Cat.E
Vibration, Random	37 gRMS
	20 – 2000 Hz
	MILSTD810F (514.6)
Acceleration	120g
	MILSTD810F (513.5)
Shock	50g / 11ms
	120g / 2ms
	MILSTD810G (516.6)
ESD	4kV (contact) / 8kV
Power Supply	18 to 40 VDC 100 us power loss protection
	MILSTD704F (normal and abnormal operation)
EMI/EMC (Transient, conducted, or DO-160 inducted perturbation and protection)	
Compliant	MIL-STD461ED

OPTIONAL MODULES

Management Modules

CMA ETH	Ethernet
CMA NEX	Network Extender

Analog Acquisition Modules

CMA ANA	8 Universal Analog ch.
CMA ABC	8 Quarter/Half Bridge ch.
CMA CAA	4 Piezo-Accelerometer ch.
CMA HDA	16 Single/Diff Analog ch.
CMA HDH	16 High Voltage Analog ch.
CMA SCN	2 Scanner ch.
CMA THC	8 Thermocouple ch.
CMA VDT	4 LVDT/RVDT ch.

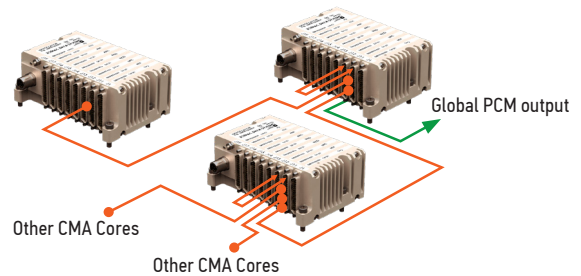
Digital Acquisition Modules

CMA AFX	2 AFDX ch.
CMA ARC	16 ARINC 429 ch.
CMA CAN	4 CAN ch.
CMA IPX	2 Ethernet ch.
CMA MIL	4 MIL-STD-1553 ch.
CMA MRC	4 MIL-STD1553 / RS-X / CAN ch.
CMA RSD	4 RS-X - 16 Discrete ch.
CMA RSX	4 RS-232/422/485 ch.
CMA SYN	2 Synchro/Resolver ch.
CMA VDA	2 Video ch.

Other Modules

CMA OBP	On-board user processing and command
CMA GPS	GNSS Receiver
CMA RCD	Flash Recorder
CMA PRO/EXT	Prototyping/Extension module
CMA TRS	S-Band transmitter
CMA DMY	Dummy/Filling

CMA NETWORK ARCHITECTURE



GLOBAL SALES

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