



ACQUIRE & PROCESS RECORD TELEMETER & STREAM REPLAY

XMA Core8 XMA Core16

NEW GEN DATA ACQUISITION UNIT FOR AIRCRAFT ONBOARD TESTING



With its small and high ruggedized design, XMA is the best fit for remote **data acquisitions in harsh and small space areas**. It is the perfect candidate for network telemetry applications and remote acquisitions, to reduce the wire intrusiveness, and acquire the data closer to the sensors.

XMA has the smallest size/channel types ratio, and proposes optimized module set for a large number of data type acquisitions, with **state-of-the-art accuracy**.

XMA also allows data recording, data processing, GPS localization and data transmission.

A complete set of status and health information of the unit is remotely available for **live monitoring and accurate data qualifiers**.



Aircraft



DESIGNED FOR HARSH ENVIRONMENT

-50°C / +105°C, waterproof, shocks, vibration, lightning, EMI/EMC



iNET READY

UDP communication, IEEE1588 synchronization, SNMP



Helicopter



ULTRA COMPACT AND GENERIC

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



EASY TO CONFIGURE

eZ software suite, XML schema (MDL)



UAV



BEST DATA EVER

500 ppm in extreme temperature range



MULTI FORMAT OUTPUT STREAM

PCM Chapter 4, Chapter 7, Chapter 10, UDP, IENA, DAR

Flight Test Instrumentation

XMA CORE8 / CORE16

TECHNICAL SPECIFICATIONS

The XMA 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

XMA 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
XMA 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

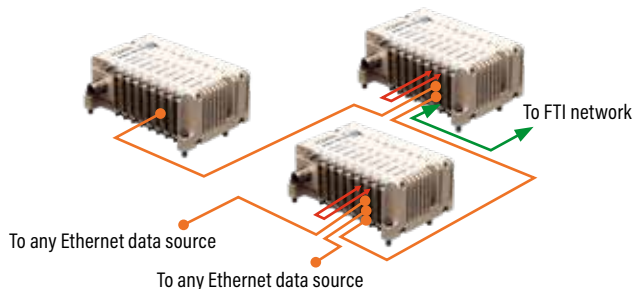
Test Procedure

Temperature Operating	-45°C to +85°C MILSTD810G
Extended Storage	-50°C to +105°C -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	30 gRMS 20 - 2000 Hz MILSTD810F (514.6)
Acceleration	30g MILSTD810F (513.5)
Shock	50g / 11ms 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

XMA ETH - Ethernet module	ETH-Link and ETH-Bridge features
XMA NEX - Network Extender module	5 Ethernet 10/100Mbps upstream ports 1 Ethernet 10/100Mbps downstream port
XMA IPX - Ethernet Acquisition module	
XMA AFX - AFDX module	2 independent or 1 redundant buses
XMA ANA - Analog acquisition module	8 generic channels differential or single ended analog signal with or without excitation (constant current or voltage) High bandwidth up to 20kHz metrological High accuracy up to 0.05% FSR ($\pm 8mV - \pm 10.24V$) Thermocouples K, J, T, E, N with cold junction compensation RTD linearisation (PT50, PT100, PT1000) Full bridge strain gauges ICP accelerometers with TEDS capability
XMA HDA - High Density Analog acquisition module	16 channels differential or single ended analog signal
XMA ARC - ARINC-429 module	16 independent channels high or low speed
XMA CAA - 4 Channels Piezo-accelerometer module	4 analog inputs
XMA CAN - CAN module	4 independent channels
XMA DAB - Discrete ABD100 acquisition module	16 monopolar inputs (up to 50V)
XMA DMY - Dummy module	
XMA GPS - GNSS Receiver module	
XMA MIL - MIL-STD1553 module	
XMA MRC - MIL-STD1553 / RSX / CAN module	
XMA PRO/EXT - Prototyping/Extension module	Hosts user defined electronic hardware 32GB
XMA RCD - Recorder module	
XMA RSD - RS and Discrete (ON/OFF) module	4 RS232/422/485 serial asynchronous channels or 2 synchronous (data + clock) 16 multifunctional discrete channels (Event, sampling, frequency, period, counter, duty cycle, ...)
XMA RSX - 4xRS 232/422/485 acquisition module	4 RS232/422/485 serial asynchronous channels or 2 synchronous (data + clock)
XMA SCN - Scanner module	2 ESP 16-HD/32HD/64HD channels
XMA SYN - 2 Channels Synchro/Resolver acquisition module	
XMA THC - 8 Thermocouple channels acquisition module	
XMA TRS - S-Band transmitter module	5W S-band transmitter
XMA VDA Video Acquisition Module	2 analog on digital inputs H.264 video compression

XMA LOCAL NETWORK



GLOBAL SALES

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ZODIAC DATA SYSTEMS

ZODIAC AEROSYSTEMS
Control Systems Division

