



XMA CORE8 XMA CORE16

**New Gen Data Acquisition Unit
for Aircraft OnBoard testing**



FLIGHT TEST INSTRUMENTATION

Heim

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

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**.

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



Aircraft



Helicopter



UAV

DESIGNED FOR HARSH ENVIRONMENT

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

ULTRA COMPACT AND GENERIC

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

BEST DATA EVER

500 ppm in extreme temperature range

INET READY

UDP communication, IEEE1588 synchronization, SNMP

EASY TO CONFIGURE

eZ software suite, XML schema (MDL)

MULTI FORMAT OUTPUT STREAM

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

XMA CORE8 / XMA 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 -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 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

Management Modules

XMA ETH Ethernet
 XMA NEX Network Extender

Analog Acquisition Modules

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

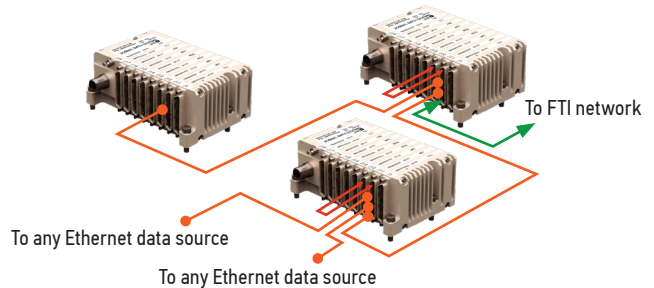
Digital Acquisition Modules

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

Other Modules

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

XMA LOCAL NETWORK



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