The Safran Data Systems XMA-BOX proposes **high performance XMA modules technology in a cost effective 1U case**. The XMA-BOX allows data acquisition of analog and digital signal and their processing and streaming in various instrumentation data format.

Ideal for ground testing facilities, the XMA-BOX is also designed to cope with environmental conditions of small to large civil aircraft cabin.

The XMA-BOX is the best fit for **multiple data acquisition needs**, as a single box or integrated in a larger FTI system all by ensuring state-of-the-art accuracy.

Designed to operate seamlessly with existing flight test systems, **the XMA-BOX is fully compatible with Safran Data Systems architecture**.

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**XMA PERFORMANCE, SIMPLE HARDWARE**
Provide XMA systems analog performance and functionalities in a cost-effective package

**MULTIPLE HARDWARE CONFIGURATIONS**
Full analog, Full ARINC 429, or digital buses: RS, MIL-STD, AFDX, CAN, Discrete

**MULTI-FORMAT OUTPUT STREAM**
Ethernet output (IENA or IRIG 106 UDP Chapter 10), PCM IRIG 106 Chapter 4 output

**EASY TO CONFIGURE**
Assisted and faster configuration through Ethernet or USB

**SYSTEM INTEGRATION**
Standalone or integrated in a full network system along with XMA devices

**MOUNTING KIT CAPABILITY**
19” rack-mouting kit including brackets and screws
TECHNICAL SPECIFICATIONS

MECHANICAL CHARACTERISTICS
Dimensions .................................................. 5,310 x 240 x 44 mm
Weight .......................................................... 1,400 g
Mounting .......................................................... chassis screws or 19” rack-mount
* with optional brackets, 2 mounting positions

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

POWER SUPPLY
Power Supply .................................................. DC 18V – 40V
Transient ......................................................... 16V – 50V DC (10s)
Max. Power consumption .................................. 60W

ENVIRONMENTAL CONDITIONS
Test Procedure
Temperature Operating ..................................... -40°C to +70°C
Humidity .......................................................... +55°C / 95%HR
Max. Altitude ..................................................... 50,000 ft
Random Vibration .............................................. Up to 2000 Hz
Shocks ............................................................. 20g / 11ms - 20g / 20ms
............................................................. DO-160 Cat.B and E
ESD ............................................................... +4kV direct contact discharge / +8kV air discharge

BOX CONFIGURATIONS
XMA-BOX ANA ............................................. 56 multifunctional analog
XMA-BOX BUS ............................................. 2 AFDX ch., 16 MRC* ch., 8 RS ch., 32 Discrete ch.
XMA-BOX ARC ............................................. 112 ARINC429 ch.
* MRC ch.: configurable into CAN, RS or MIL-STD-1553 ch.

ACQUISITION CHARACTERISTICS

Analog Acquisition channel
- Generic channels differential or single ended analog signal with or without excitation (current or voltage)
- High bandwidth up to 20kHz metrological
- High accuracy down to 0.05% FSR (±8mV - ±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 (optional)
- Multiprocessing

ARINC-429 channel
- High or low speed ARINC-429 channel
- Transparent or filtered mode (including optional SDI filter)
- 3 levels of data extraction: bus, frame & word

MIL-STD-1553 channel
- Independent or redundant channel
- Transparent mode
- Up to 1024 filters on specific 1553 message
- Up to 2048 data extractions

RS channel
- Asynchronous mode: RS232, RS422, RS485
- Synchronous mode: RS422/485 (Data + clock)
- Datarate up to 10Mbps
- Configurable frame synchronization (Gap, Sync word)
- Filtering on Header or Label
- Data Extraction

CAN channel
- Transparent or filtered mode
- Up to 1024 filters (Bus Frame identifier 11 or 29 bits)

Discrete channel
- Differential or unipolar discrete inputs with independent configurable threshold
- Sampling or Event mode
- Processing functions: Frequency, Period, Counter

OPTIONS
RTC .......................................................... Real time clock – one week retention
AC Power supply ........................................... 100-240V AC/50-60Hz: 28V adapter
Mounting kit .............................................. 19” rack-mounting kit including brackets and screws