

D.T.MUXTM NANO



Reference: DT-MUX-NANO

The D.T.MUX Nano is a powerful, miniature airborne data recorder, available in **three form factors**, with **solid-state storage** from 64 GB up to 2 TB. It supports **military-grade encryption**, **secure data erasure**, and **physical destruction** capabilities, ensuring the highest level of data protection. The system is fully **IRIG 106 Chapter 10 compliant**.

Designed as an **ultra-compact and standalone unit**, the Nano features **quick-access removable SSD media** for fast and simple data retrieval at mission or exploitation centers.

The unit can also be tailored to **custom configurations**, making it ideal for demanding **surveillance, reconnaissance, and mission recording applications**.

Applications

- Mission recording and debriefing
- Pilot training support
- Reconnaissance and surveillance
- Integration on fixed-wing, rotary-wing, and UAV platforms

Despite its small footprint (only 1 kg / 2.2 lbs), the Nano delivers **multi-source recording** in real time, covering both **data buses and video/audio streams** simultaneously.

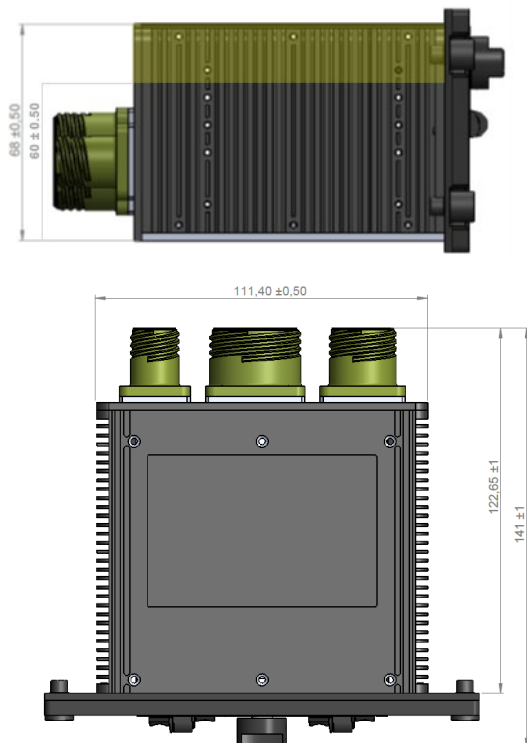
Key Features

- **Ultra-compact (1 kg)** with minimal footprint
- **High-capacity removable SSD**: 64 GB to 2 TB
- **Military-grade security**: encryption, secure erase, physical destruction
- **Flexible multi-source recording**: digital buses, video, audio, analog sensors
- **IRIG 106 Chapter 10 compliant**
- **Customizable configurations** for specific mission requirements

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MECHANICAL

	Specification	Remark
Size (S)	141 x 111.4 x 68 mm	Standard
Size (L)	141 x 111.4 x 60 mm	Low profile
Size (R)	141 x 111.4 x 80 mm	CP option
Weight	≈ 1Kg	≈ 2.2lbs
Connectors	MIL-DTL-38999	Serie III
Mounting	DZUS or Fix plate	Customizable



ELECTRICAL

Input Voltage	28Vdc (16 to 36Vdc)
Power consumption	≈ 12 to 25 watts (28Vdc)
Power Interruption	≈ 60 to 100ms
Standard	MIL-STD-704F

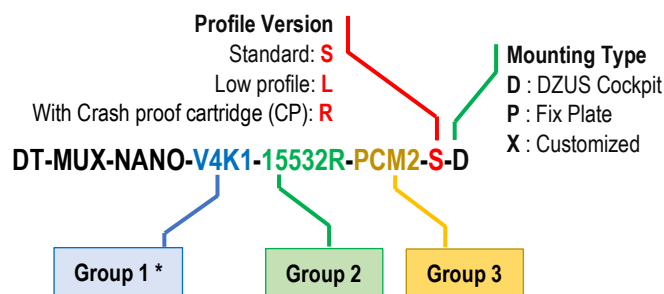
ENVIRONMENTAL

	Specification	Remark
Temperature	-40°C to 71°C	Operating
	-55°C to 95°C	Storage
Cooling	Passive	Convection
Humidity	95%	Non-Cond
Vibration	5Hz to 2KHz	6.29 g RMS
Shocks	60g 11ms	Operating
Acceleration	20g linear 3 axis	Operating
Altitude	+ 60,000 ft	Operating
Decompression	420Kpa/minute	Operating
MTBF	> 50,000 hours	Computed
EMI	MIL-STD-461	Rev F

STANDARD FUNCTIONALITY

	Specification
Gigabit Ethernet	Configuration/Control
	Data download and Streaming
Time synch	GPS Antenna input / Irig B / PTP v2
Audio	One included
Recording	IRIG 106 Chapter 10 / DTMUX format
COM port	RS-232 Configuration/Maintenance
LED	Status LED / Status output

PART NUMBERING GUIDE



SELECTABLE CHANNELS

TYPE	CODE	Max Channels**		
MIL-STD-1553	1553	2R (4)	2R (4)	0
ETHERNET (GbE)	ETH	2	2	0
ARINC 429	A429	12	12	8
ARINC 717	A717	12	12	8
ARINC 573	A573	12	12	8
PCM	PCM	4	4	4
RS232/422	RS	12	12	8
CAN	CAN	8	8	8
DISCRETE	DS	24	24	12
ANALOG	LOG	16	16	8
VIDEO SD	VSD	2	2	2
VIDEO HD	VHD	2	2	0
VIDEO 4K	V4K	1	1	0

System can be design following your special requirement.

*Low profile version only support "Group 1"

**You can select number of channel desired from 0 to max value.

STORAGE CARTRIDGE

SSD-512-DE-QE-0-N



Storage Capacity	32 / 64 / 128 / 256 / 512 / 1TB / 2TB
Data Encryption	DE / 0*
Quick Erase	QE / 0*
Physical Destruction	PD / 0*
Crash Proof	CP / 0*

*0= None

SSD for configuration is also available

PN# SSD-CONF-N