

EN12830:2018 Annex C - Declaration of Conformance

Compliant Recorder: DS1925L-F5# iButton High-Density Temperature Logger

Declaration Date: 1/24/2023

Informative: DS1925L-F5# complies with BS EN12830:2018 standard. Listed below are the specification showing suitability for use according to BS EN12830:2018 standard.

Type of recorder	DS1925L-F5# iButton
Suitable for storage	Yes - 61k 16-bit readings -122k 8-bit readings
Suitable for transport	Yes - Durable stainless-steel enclosure withstands harsh environments and conditions
I - General requirements	
Measuring range (see 5.2)	-40C to 85C
Chart (disk, tape) (see 5.5.3)	Not applicable
Autonomous power supply (see 5.6)	3V, 48mAh Coin-type Lithium Battery for high temperature Battery Condition is available in software to warn users Expected battery life is provided in the product datasheet
Degree of protection provided by the enclosure (see 5.7)	Yes, IP56 ¹
Supply voltage (see 5.9.1)	Not applicable
Frequency (see 5.9.3)	Not applicable
Power cut-offs (see 5.9.4)	Product datasheet declares in text that output logged data is reported if battery is depleted. Logged data duration is at least 2 years or more without battery as to support product lifetime graph.

II - Requirements for metrological characteristics	
Maximum permissible error and resolution (see 5.10.2.1) and temperature measurement error (see 6.3)	Class 1 ²
Recording Interval (see 5.10.2.3)	Defined in the product datasheet as selectable range from 5 min to 273 hours Recorded values can be overwritten if device not password protected
Recording duration (see 5.10.2.4)	Meets requirement (Test Report No. E102 section 3.5.5) ²
Storage duration (see Annex D)	Details provided in product datasheet plot of 'Typical Product Lifetime' (D.2) and the Mission section (D.1) 5 min measurement intervals available up to 436 days and lifetime up to 2.2 years at +85C or 4 years at +25C
Maximum relative timing error (see 5.10.2.4) and time recording error (see 6.5)	Defined in product datasheet 1 minute per month which is smaller than this requirement. (Also see Test Report No. E102 section 3.5.5) ²
Response time (see 5.10.2.5 and 6.4)	Defined in product datasheet as 130s which is much smaller than the requirement (Also see Test Report No. E102 section 3.3.4) ²
Climate environment (see 5.10.3.1) and influence of ambient temperature (see 6.6.3)	Details provided in the product datasheet with -40C to +85C temperature recorder range and storage with battery (Also see Test Report N. E102 section 3.3.2) ²

Mechanical vibrations (see 5.10.3.2 and 6.6.6)	Meets requirements. For all three directions, no variation above 0.5°C was observed on the temperature recording ³
Shock resistance (see 5.10.3.3 and 6.6.5)	Meets requirements. During and at the issue of this test, the recorder operated normally ³ Two hours later, no variation above 0.5°C was observed for the temperature recording ³
Climate environment (see 5.10.3.1) and temperature testing under storage and transport conditions for the recorder (see 6.6.4)	Details provided in the product datasheet with -40C to +85C temperature recorder range and storage with battery (Also see Test Report N. E102 section 3.3.3) ²
Electrical power disturbances and susceptibility to radiated electromagnetic field (see 5.9.5) and dielectric strength (see 6.6.9)	Conforms per EMC CE (Also see Test Report N. 2016 11317993 EMC CE) ⁴

Name of testing bodies:

¹Labtest Certification, Report Number 8680-1 Test device was DS1922L, which uses the same case as DS1925L. Issued 2nd March 2007.

²Cemafruid, Report Number E102, issued 19th October 2017.

³Analog Devices (ADI), Worldwide Quality dept, Report Number E2204001, issued 1st December 2022.

⁴Nemko USA, Inc., Report Number 2016 11317993 EMC CE, issued 15th November 2016.