

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of Norway.

This is to certify:

That the Voyage data recorder (VDR) and Simplified voyage data recorder (S-VDR)

with type designation(s)
Totem VDR

Issued to

Totem Plus Europe GmbH
Hamburg, Germany

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2018/773**,

item No. MED/4.29. SOLAS 74 as amended, Regulations V/18, V/20 & X/3, IMO Res. A.694(17), IMO Res. MSC.36(63), IMO Res. MSC.97(73), IMO Res. MSC.191(79), IMO Res. MSC.302(87), IMO Res. MSC.333(90)

item No. MED/4.47. SOLAS 74 as amended, Regulation V/20, IMO Res. A.694(17), IMO Res. MSC.163(78), IMO Res. MSC.191(79), IMO Res. MSC.302(87)

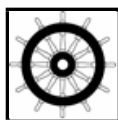
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2024-08-06**.

Issued at **Høvik** on **2019-08-07**

DNV GL local station:
Haifa

Approval Engineer:
Roger Lauritsen



Notified Body
No.: **0575**

for **DNV GL AS**

Roald Vårheim
Head of Notified Body



The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.



Product description

Totem VDR comprising the following units:

Hardware

Component	Model:	Remarks	Location
Main unit	Totem PC TPC 1.3 • Main Cabinet VDR1.1/1.2 or VDR1.3 for bulkhead mounted • Frame Grabber: UFG-01 or Epiphan VGA2USB • I/O-card: COM PCI 8P • I/O Serial card: ADAM 4510S and/or IRV-01 • Audio Card: Terratec EWS88MT • PLC: Siemens Simatic S7	500 GB RS485	Protected
Protective Capsule	PMC1.1, Float Free Capsule RLB-35MC	32 GB	Exposed
Alert Panel	ALP3.1		Protected
Microphones	MC1.2		Protected
UPS	Totem UPS A1.3	See limitation	Protected

Software

Component	Name	Version
Totem PC TPC 1.3	Windows XP	Professional
	BlackBox10.exe	7.1.x.x
	VDR.mwp	V1.2
PMC1.1		
PLC		

Application/Limitation

- The VDR installation shall be commissioned onboard in accordance with the procedures of the "User Manual". Protective capsule memory is 32 GB. Long Term Medium storage is a 500GB computer hard disk.
- Local Area Network connection for binary image transfer is tested according to relevant sections in IEC 61162-450 (2011) and IEC 62388 (2007) .
- Local Area Network connection may be used for binary image transfer from ECDIS and Radar only, limited to maximum total of 6 ECDIS or Radar stations.
- UPS buzzer to be disabled if installed on bridge.

Type Examination documentation

DNV GL No	Doc. Ref.	Rev.	Description
10029	03.07.07		Doc: IRV-01 Isolated Receiver Testing Statement
10079	TAA3550		Documentation from initial certification located in old folder.
10059	Ver 1.2	1.2	Manual : VDR USB HD Manual
10052		02	Manual: Totem PC V2 - AIMB-766 - User's Manual
10064		2.6	Manual: Totem VDR Investigator Manual_V2.6
10061	Ver. 10.1	10.1	Manual: Totem VDR Replay Manual
10060	May 11, 2006	1.1	Manual: Totem VDR/SVDR - VDR Query Client
10065		11.3	Manual: VDR User Manual Ver 11.3
10043	2006008		Report: ACME EMC testing of ACR TR RLB-35MC
10047	Performance_13 Rev.1		Report: Hardware testing of IRV-01
10032	TOTENV IEC17725-2		Report: HERMON, Environmental Test Report for VDR 1.3
10044	17200-1		Report: IMANNA, Environmental testing of RLB-35MC
10028	8712310820		Report: IRV-01 EMC test report
10035	4R07910.1		Report: NEMKO -EMC testing of VGA2USB
10038	4R07910		Report: NEMKO -EMC testing of VGA2USB
10048	Performance_12 Rev.2		Report: Subjective testing of VGA2USB video grabber
10049	Performance_11 Rev.5		Report: Testing according to IEC61996 Item 6.1.6 with ACR RLB35MC and VGA2USB
10050	Performance_14 Rev 1.		Report: Testing according to IEC61996 Item 6.2.4 video grabber test with VGA2USB
10019	8412318922 rev.1	1	Report: Totem PC TPC 1.2 - The Standards Institution of Israel (2004)
10054	Performance 15 V1.1	30.07.09	Report: Totem VDR - Dry Heat and Recording Duration
10055	Performance 15 V2.1	08.09.09	Report: Totem VDR - Low Temperature endurance test
10053	Performance 16 V1.1	05.08.09	Report: Totem VDR - Power Supply Failure
10075	Performance 17F	1.0	Report: Totem VDR performance tests follow-up report
10076	Performance 17R	1.0	Report: Totem VDR performance tests remote session follow up report
10074	Performance 17	06/12/2013	Report: Totem VDR performance, additional tests
10078	TV-TR-20007		Report: Totem VDR Test plan and report, MSC.302(87) adaption
10057	11211070		Report: Totem VDR, IEC 61162-1 (2010) - additional tests
10058	11211070		Report: Totem VDR, IEC 61996-1 (2007) - additional tests

Tests carried out

Performance testing according to IEC 61996-1 (2013)
Environmental testing according to IEC 60945 (2002)
Serial interface testing according to IEC 61162-1 (2016)
Presentation testing according to, IEC 62288 (2014)



Job Id: **344.1-000100-9**
Certificate No: **MEDB00005MX**

Marking of product

The type designation and name and contact address of the manufacturer shall be affixed visibly, legibly and indelibly to the product. In addition the product shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.