



DET NORSKE VERITAS

TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. A-9747
This Certificate consists of 4 pages

This is to certify that the
Peripheral Equipment

with type designation
SIXNET modules for measuring and control


Manufactured by
SIXNET
CLIFTON PARK NY 12065, United States

is found to comply with
Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards

Application
This Type Approval covers hardware only.

Temperature	A
Humidity	B
Vibration	A
EMC	B
Enclosure	Required protection to be provided upon installation on board

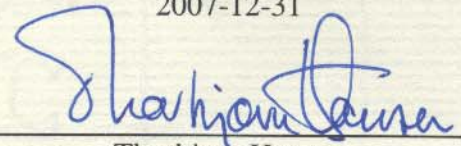
Place and date
Høvik, 2005-11-04
for DET NORSKE VERITAS AS


Knut-Helge Knutsen
Head of Section



Local Office
DNV New York

This Certificate is valid until
2007-12-31


Thorbjørn Hansen
Surveyor

Notice: This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.



Product description

The SIXNET-system comprises industrial modules for automation, control and communications including:

- EtherTRAK I/O modules
- EtherTRAK gateway
- EtherTRAK switch
- RemoteTRAK I/O modules
- RemoteLog RTU
- Sixnet Power supply

EtherTRAK I/O Modules, ET-AABBB-C		
Code	Specification	Valid combinations
ET	EtherTRAK Series	
AA	No of specified I/O types	
BBB	I/O combinations	AI, AO, DI, DO, RTD, INS, MIX
C	No of I/O Channels	U(8), H(16), D(32)

EtherTRAK Gateway, ET-GT-AAA-1		
Code	Specification	Valid combinations
ET-GT	EtherTRAK Series	
AAA	Protocol	232 / 485

EtherTRAK Ethernet Switch, ET-ABB-CD		
Code	Specification	Valid combinations
ET	EtherTRAK Series	ET or ET-GT
A	No of ports	5,9
BB	Model	ES, RS, MS, RG, MG
C	Plug and fiber type	1, 2, 3, 4, 5
D	Fiber Connector	SC, ST, LC

RemoteTRAK I/O Modules, RM-AABBB-C		
Code	Specification	Valid combinations
RM	RemoteTRAK Series	
AA	No of specified I/O types	
BBB	I/O combinations	AI, AO, DI, DO, INS, RTU
C	No of I/O Channels	U(8), F(8), H(16)



Cert. No.: A-9747
File No.: 899.60

RemoteLog RTU, SR-4160-AA-1		
Code	Specification	Valid combinations
SR	RemoteLog	
AA	Configuration	1T : Includes industrial Telephone Modem 1E : Includes Industrial 10Mbps Ethernet port 1S : Includes serial port for external modem 1SL : Low power SiteTRAK for an external modem

SIXNET Power supply, ST/VT-PS-024-01N/02N	
Code	Specification
ST-PS-024-02N	DIN-rail mount option
VT-PS-024-01N	Direct panel mount option

Application/Limitation

Installation and use of the SIXNET-system in essential and important systems is subject for case by case approval.

The Type Approval covers hardware listed under Product Description. In each case the hardware is used in application to be classed by DNV, documentation for the actual application is to be submitted for approval by the manufacturer of the application system. Reference to applied hardware as listed above, as well as reference to this certificate is to be made through the instrument and equipment list covering the application system in question.

Reference is made to DNV Rules for Ships Pt. 4 Ch. 9 - Control and Monitoring Systems

Type Approval documentation

Document	Document no	Document rev
DNV Type Approval Testing	2002-3102	01
EtherTRAK I/O Modules, Product brochure		23-Aug-05
EtherTRAK Ethernet Gateway, Product brochure		
EtherTRAK Combination I/O Modules, Product brochure		
EtherTRAK I/O Switch, Product brochure		23-Aug-05
RemoteTRAK I/O Modules, Product brochure		23-Aug-05
RemoteLOG RTU, Product brochure		Rev0305
SixTRAK 24VDC Power Supply, Product brochure		



Cert. No.: A-9747
File No.: 899.60

Tests carried out

According to S.f.C version 2.4

Certificate retention survey

The scope of the retention/renewal survey is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the survey are:

- Ensure that type approved documentation is available.
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines.
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications.
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given.
- Ensuring traceability between manufacturer's product type marking and the type approval certificate.

Survey to be performed at renewal of this certificate.

END OF CERTIFICATE