



Confirmation of Product Type Approval 02/FEB/2009

Please refer to the "Service Restrictions" shown below to determine if Unit Certification is required for this product.

This is to certify that, pursuant to the Rules of the American Bureau of Shipping (ABS), the manufacturer of the below listed product held a valid Manufacturing Assessment (MA) with expiration date of 07/AUG/2011. The continued validity of the Manufacturing Assessment is dependent on completion of satisfactory audits as required by the ABS Rules.

And; a Product Design Assessment (PDA) valid until 17/DEC/2013 subject to continued compliance with the Rules or standards used in the evaluation of the product.

The above entitle the product to be called Product Type Approved.

The Product Design Assessment is valid for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

N-TRON CORP.

Model Name(s): Series 100/700/1000

Presented to:

N-TRON CORP.
820 S UNIVERSITY BLVD.
SUITE 4E
MOBILE
AL 36609
United States

Intended Service:

Ethernet Switches for Marine, Offshore and Industrial network applications

Description:

The Series 100 is Unmanaged Ethernet switches, Series 700 is Managed Ethernet switches and the Series 1000 is Unmanaged Gigabit Ethernet switches. These switches provide multi RJ-45 auto sensing 10/100 BaseTX or 10/100/1000 BaseT ports and one or two 100 BaseFX or 1000 BaseSX/LX SFP fibre optic uplink ports. The Series 700 consists of management functions configurable using a Web Browser. The series 100-POE4/105TX-POE versions are able to power devices via the network. All switch units are DIN rails mountable. Enclosure rating of the M12 switches is up to IP67 with D-coded style connectors. Series 100 comprises type 102MC, 104TX, 105TX, 105FX, 108TX, 100-POE4, 105TX-POE, 105FX-POE, 105M12 and 108M12; Series 700 comprises type 708TX, 708FX2, 1003GX2 and 708M12; Series 1000 comprises type 1002MC, 1003GX2 and 1005TX.

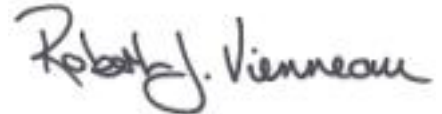
Ratings:

Input Voltage: 10-30 and 46-49 VDC; Input Current: 140 to 250 mA@24V and 1.6A@48V; Class I, Div 2 Group A, B, C and D, T4 or T4A; Network Media: CAT 3 or CAT5 cables.

Service Restrictions:

Unit Certification is not required for this product. If the manufacturer or purchaser's request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

Comments:	None
Notes / Documentation:	Test Report No. TL1212
Term of Validity:	This Design Assessment Certificate number 08-LD412000-PDA, dated 18/Dec/2008 will expire on 17/Dec/2013 or at an earlier date should there be alterations to the product's design or changes to the referenced ABS Rules and other specifications, which affect the product. Product use on or after 1 January 2009, will be subject to compliance with the ABS Rules or specifications in effect when the vessel, MODU or facility is contracted. The product's acceptability on board ABS-classed vessels or facilities is defined in the service restrictions of this certificate.
ABS Rules:	2008 Steel Vessel Rules 1-1-4/7.7, 4-8-3/1.7, 4-9-7/13
National Standards:	FCC Title 47, Part 15, Subpart B - class A
International Standards:	IACS E10
Government Authority:	
EUMED:	
Others:	None



ABS Programs

ABS has used due diligence in the preparation of this certificate and it represents the information on the product in the ABS Records as of the date and time the certificate was printed. Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. Limited circumstances may allow only Prototype Testing to satisfy Type Approval. The approvals of Drawings and Products remain valid as long as the ABS Rule, to which they were assessed, remains valid. ABS cautions manufacturers to review and maintain compliance with all other specifications to which the product may have been assessed. Further, unless it is specifically indicated in the description of the product; Type Approval does not necessarily waive witnessed inspection or survey procedures (where otherwise required) for products to be used in a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS. Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.