Type Approval Certificate

Germanischer Lloyd

This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the GL Type Approval System.

Certificate No.	**4310902 HH**
Company	**Hirschmann Electronics GmbH & Co. KG** **Stuttgarter Straße 45 - 51** **D-72654 Neckartenzlingen**
Product Description	**Ethernet LAN components** **Switches and Media Modules**
Type	**MICE**
Environmental Category	**C, EMC 1**
Technical Data / Range of Application	**Modular industrial communication equipment.** **It allows to construct switched ETHERNET networks that conform to the IEEE 802. and 802.3u standard using copper wires or optical fibers in a bus or ring topology.** **The switches are mounted by snapping them onto a standard DIN rail.** **The components covered by this certificate are listed on page 2 and 3.**
Test Standard	**Guidelines for the Performance of Type Approvals 2003** **Regulations for the Use of Computers and Computer Systems**
Documents	**Tests according to table "Übersicht Baumusterprüfungen M I C E"** **Manual "Beschreibung und Betriebsanleitung MICE"** **CD 140203, CD MM3-xFX** **Software Questionaire requirement class 3, dated 2000-03-28**
Remarks	**Application specific system requirements are to be observed for the network layout.**
Valid until	**2009-03-08**

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Type Approval Symbol (GL) (GL)

File No.   **I.B.08**

Hamburg, 2004-03-09

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This certificate is issued on the basis of "Regulations for the Performance of Type Tests, Part 0, Procedure".

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Switches:
- MS2108-2: 8-port Ethernet / Fast Ethernet Switch, 2 slots for Media Modules
- MS3124-4: 8-port Ethernet / Fast Ethernet Switch, 4 slots for Media Modules
- MB-2T: backplane, extension accessory to MS3124-4, 2 slots for Media Modules

Media Modules, twisted-pair ports:
- MM2-4TX1: 4 ports, 100BASE-T(X), RJ45

Media Modules, F/O ports:
- MM2-4FXM3: 4 ports, 100BASE-FX, multimode, MTRJ connections
- MM2-2FXM2: 2 ports, 100BASE-FX, multimode, DSC connections
- MM2-2FXS2: 2 ports, 100BASE-FX, singlemode, DSC connections
- MM3-4FXM2: 4 ports, 100BASE-FX, multimode, DSC connections
- MM3-4FXM4: 4 ports, 100BASE-FX, multimode, BFOC connections
- MM3-4FXS2: 4 ports, 100BASE-FX, singlemode, DSC connections
- MM3-4FLM4: 4 ports, 10BASE-FL, multimode, ST connections
- MM2-2FLM4: 2 ports, 10 Base-FL, multimode, ST connections

Valid until   **2009-03-08**

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Certificate No.   **4310902 HH**

Media Modules, twisted-pair and F/O ports:

 - MM2-2FXM3/2TX1:
     2 ports 100BASE-FX, multimode, MTRJ connections
     2 ports 10/100BASE-T(X), RJ45
 - MM3-1FXM2/3TX1:
     1 port 100BASE-FX, multimode, DSC connection
     3 ports 10/100BASE-T(X), RJ45
 - MM3-2FXM2 / 2TX1:
     2 ports 100BASE-FX, multimode, DSC connections
     2 ports 10/100BASE-T(X), RJ45
 - MM3-2FXM4 / 2TX1:
     2 ports 100BASE-FX, multimode, BFOC connections
     2 ports 10/100BASE-T(X), RJ45
 - MM3-1FXS2 / 3TX1:
     1 port 100BASE-FX, singlemode, DSC connection
     3 ports 10/100BASE-T(X), RJ45
 - MM3-2FXS2 / 2TX1:
     2 ports 100BASE-FX, singlemode, DSC connections
     2 ports 10/100BASE-T(X), RJ45
 - MM3-1FXL2 / 3TX1:
     1 port 100BASE-FX, singlemode, DSC connections, Long Haul
     3 ports 10/100BASE-T(X), RJ45
                         Software Version MICE 4.02

Valid until   **2009-03-08**

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File No.   **I.B.08**

Hamburg, 2004-03-09

Germanischer Lloyd   W. Voß   M. Rinkel

This certificate is issued on the basis of "Regulations for the Performance of Type Tests, Part 0, Procedure".