



Bundesrepublik Deutschland

Federal Republic of Germany

Bundesamt für Seeschifffahrt und Hydrographie

Federal Maritime and Hydrographic Agency



BUNDESAMT FÜR
SEESCHIFFFAHRT
UND
HYDROGRAPHIE

EC TYPE EXAMINATION (MODULE B) CERTIFICATE

This is to certify that:

Bundesamt für Seeschifffahrt und Hydrographie, specified as a "notified body" under the terms of „Schiffssicherheitsgesetz“ of 9. September 1998 (BGBl. I, p. 2860) modified last 19. December 2002 (BGBl. I, p. 4690), did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with the Navigation requirements of Marine Equipment Directive (MED) 96/98/EC as modified by Directive 2002/75/EC.

Applicant **MX Marine, Leica Geosystems**
Address **23868 Hawthorne Blvd, Suite 200 Torrance, CA. USA 90505-5908**
and
Hørkær 12A, 2730 Herlev, Denmark

Manufacturer **MX Marine, Leica Geosystems**
Address **23868 Hawthorne Blvd, Suite 200 Torrance, CA. USA 90505-5908**
and
Hørkær 12A, 2730 Herlev, Denmark

Annex A.1 Item **4.14 GPS Equipment**
(No & item designation)

Product Name **MX521 GPS/DGPS Sensor**

Trade Name(s) **See annex of this certificate**

IMO Resolution MSC.112 (73)	IEC 61108-1 (Global positioning system (GPS) – Receiver equipment, Edition 2, 2003)
	IEC 61162-1 (Serial interface, Edition 2, 2000)
	IEC 60945 (Environmental conditions, Edition 3, 1996)

This certificate remains valid unless cancelled, expired or revoked.

Date of issue: 16. February 2004

Issued by: **Bundesamt für Seeschifffahrt und Hydrographie
Bernhard-Nocht-Str. 78, 20359 Hamburg, Germany
Notified body 0735**

Expiry date: --

Certificate No.: **6581 / 080 339 / 2004**

This certificate consists of 2 pages.



by order

Falk Bethke



Components necessary for operation:

Component	Type name	Part No.
DGPS Sensor	MX521	P/N 727010
GPS Sensor	MX521G	P/N 727027
User interface unit	Either: MX420/2 or MX420/8	See Annex 1 of this certificate
Application Software	Version 2.0x	

Documentation:

- MX521 DGPS Sensor Installation Service Manual. P/N 727011,
- MX420 Navigation System Operator's Manual. P/N 3508 102 70040

Limitations on the acceptance or use of the product:

Places of production:

MX521 GPS/DGPS Sensor	CSI (Communication Systems International Inc.) 4110 - 9th Street SE Calgary, T2G 3C4 Alberta Canada
User interface unit MX420	BB electronics A/S Ane Stauningsvej 21 8700 Horsens Denmark

Notes:

The manufacturer shall inform Bundesamt für Seeschifffahrt und Hydrographie, as the notified body, of any modifications to the type-tested product(s) that may affect compliance with the requirements or conditions laid down for use of the product(s).

In case the specified regulations or standards are amended during the validity of this certificate, the product(s) must be re-certified before being placed on board vessels to which such amended regulations or standards apply.

The Mark of Conformity (wheelmark) may only be affixed to the type approved equipment, and a Manufacturer's Declaration of Conformity may only be issued, if the product quality system fully complies with the Marine Equipment Directive and is certified by a notified body against ANNEX B module D, E, or F of the Directive.

Example for the Application of the "Mark of Conformity":

xxxx number of the Notified Body responsible for quality surveillance module
yy Last two digits of the year in which the mark is affixed.

Notice on legal remedies available:

Objection to this document may be filed within one month after notification. The objection must be filed in writing to, or put on record at, Federal Maritime and Hydrographic Agency, Bernhard-Nocht-Str. 78, 20359 Hamburg, Germany

ANNEX TO EC TYPE EXAMINATION (MODULE B) CERTIFICATE No. 6581 / 080 339 / 2004

The equipment is also distributed by the following vendors under the noted trade names:

Vendor	Type designation	Part No.	
MX Marine Leica Geosystems A/S Hørkær 12A 2730 Herlev Denmark	- MX420 GPS	350810270200 / 727027 or 350810270210 / 727027	
	- MX420 DGPS	350810270200 / 727010 or 350810270210 / 727010	
	- AP MK12 GPS	350810270220 / 727027	
	- AP MK12 DGPS	350810270220 / 727010	
SAM Electronics GmbH Behringstrasse 120 D-22763 Hamburg Germany	- DEBEG 4422 GPS	} Containing user interface unit MX420/2	350810270250 / 727027
	- DEBEG 4422 DGPS		350810270250 / 727010
	- DEBEG 4428 GPS	} Containing user interface unit MX420/8	350810270270 / 727027
	- DEBEG 4428 DGPS		350810270270 / 727010
Northrop Grumman Sperry Marine 118 Burlington Road, New Malden UK-KT3 4NR, Surrey United Kingdom	- LMX420 GPS	350810270280 / 727027 or 350810270290 / 727027	
	- LMX420 DGPS	350810270280 / 727010 or 350810270290 / 727010	
KELVIN HUGHES LTD New North Road, Hainault, Ilford UK-IG62UR, Essex United Kingdom	- MX420 GPS	350810270300 / 727027 or 350810270310 / 727027	
	- MX420 DGPS	350810270300 / 727010 or 350810270310 / 727010	
Raytheon Marine GmbH Zeyestrasse 16-24 D-24106 Kiel Germany	- MX420 GPS	350810270330 / 727027 or 350810270340 / 727027	
	- MX420 DGPS	350810270330 / 727010 or 350810270340 / 727010	