



U. S. Department of Homeland Security
United States Coast Guard
Certificate of Approval

Coast Guard Approval Number: 165.123/18/3

Expires: 19 November 2023

ELECTRONIC CHART DISPLAY AND INFORMATION SYSTEM

Furuno Electric Co., Ltd.
9-52 Ashihara-cho
Nishinomyia 662-8580 JAPAN

Furuno Electric Co., Ltd. FMD-3200/3200-BB/FMD-3300

The Furuno Electric Co., Ltd. FMD-3200/3200-BB/FMD-3300 system meets the following standards as set forth in the International Convention for the Safety of Life at Sea (SOLAS) Chapter V Regulation 18:

IMO Resolution A.694(17) (1991-12),
IMO Resolution MSC.232(82) (2006-12),
IMO Resolution MSC.191(79) (2004-12),
IMO Resolution MSC.302(87) (2010-5),
IEC 61162 (applicable part) (2016-08),
IEC 61174 (2015-08),
IEC 62288 (2014-07), and
IEC 62388 Annex A (2013-06)

Furuno Electric Co., Ltd. FMD-3200/3200-BB/FMD-3300 ECDIS consists of the following equipment:

Computer: Furuno EC-3000
Monitor: Furuno MU-190, Furuno MU-201CE, Furuno MU-231, Furuno MU-231CE, Hatteland JH19T14FUD, Hatteland JH20T17FUD, Hatteland JH23T12FUD, Hatteland JH23T14FUD, or Hatteland HD26T21 MMD-MA-4
Operation Panel: Furuno RCU-024
Trackball Control Panel: Furuno RCU-026
Data Interface Unit (Sensor Adaptor) (optional): Furuno MC-3000S, MC-3010A, MC-3020D, or MC-3030D
Network Switch/Switching HUB: Furuno HUB-100
Network Switch/Intelligent HUB: Furuno HUB-3000
Software: FMD-3000 ECDIS software version 01.xx

A dual installation of the Furuno Electric Co., Ltd. FMD-3200/3200-BB/FMD-3300 complies with the requirement for ECDIS with back-up arrangements (USCG 165.124/11/1).

Supersedes certificate 165.123/18/2 dated February 3, 2016.

*** End ***

THIS IS TO CERTIFY THAT the above named manufacturer has submitted to the undersigned satisfactory evidence that the item specified herein complies with the applicable laws and regulations as outlined on the reverse side of this Certificate, and approval is hereby given. This approval shall be in effect until the expiration date hereon unless sooner canceled or suspended by proper authority.



GIVEN UNDER MY HAND THIS 19th DAY OF
NOVEMBER 2018, AT WASHINGTON D.C.

J. H. MILLER, P.E., CDR
CHIEF, SYSTEMS ENGINEERING DIVISION
BY DIRECTION OF THE COMMANDANT

TERMS: The approval of the item described on the face of the Certificate has been based upon the submittal of satisfactory evidence that the item complies with the applicable provisions of the navigation and shipping laws and the applicable regulations in Title 33 and/or Title 46 of the Code of Federal Regulations. The approval is subject to any conditions noted on this Certificate and in the applicable laws and regulations governing the use of the item on vessels subject to Coast Guard inspection or on other vessels and boats.

Consideration will be given to an extension of this approval provided application is made 3 months prior to the expiration date of this Certificate.

The approval holder is responsible for making sure that the required inspections or tests of materials or devices covered by this approval are carried out during production as prescribed in the applicable regulations.

The approval of the item covered by this certificate is valid only so long as the item is manufactured in conformance with the details of the approved drawings, specifications, or other data referred to. No modification in the approved design, construction, or materials is to be adopted until the modification has been presented for consideration by the Commandant and confirmation received that the proposed alteration is acceptable.

NOTICE: Where a manufacturer of safety-at-sea equipment is offering for sale to the maritime industry, directly or indirectly, equipment represented to be approved, which fails to conform with either the design details or material specifications, or both, as approved by the Coast Guard, immediate action may be taken to invoke the various penalties and sanctions provided by law including prosecution under 46 U.S.C. 3318, which provides:

"A person that knowingly manufactures, sells, offers for sale, or possesses with intent to sell, any equipment subject to this part (*Part B. of Subtitle II of Title 46 U.S.C.*) and the equipment is so defective as to be insufficient to accomplish the purpose for which it is intended, shall be fined not more than \$10,000, imprisoned for not more than 5 years or both."

