MARINE OTOMASYON SİSTEMLERİ

Marine Automation Systems



Navigation Light Control Panel

NLC-07M

DATA SHEET

Document: **NLC-07M-DS**
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www.marineotomasyon.com.tr

OVERVIEW



Product Description

The NLC-07M is a 7-inch touchscreen operator panel for the control and monitoring of navigation and signal lights. It is flush mounted in the bridge console and works together with the SF-16B navigation light module, which drives the lights.

The lights are controlled from the panel. The panel is connected to the SF-16B over RS-485 and is powered with 24 VDC from the module through the same cable. As an option, an Ethernet port connects the panel to the vessel's alarm and monitoring system (AMS), so the lights can also be switched and the alarms monitored from the AMS.

The 7-inch display (800 × 480 pixels, 1000 nits) is readable in direct sunlight and has day and night modes. The NLC-07M is MED certified.

KEY FEATURES

- Vessel mimic with every light at its position and its live status, configured for each vessel
- Individual and group control: navigation mode, NUC mode, all lights off
- Automatic changeover from the main to the spare lamp
- Screen dimming, day and night mode; light dimming on naval vessels
- Alarms with internal buzzer and visual indication; alarm list and alarm log
- Monitoring of the main and emergency 24 VDC supplies
- Optional Ethernet connection to the AMS for light control and alarm monitoring from the AMS
- IP56 protection, MED certified

SPECIFICATIONS

GENERAL	
Model	NLC-07M
Order code	302112
Application	Navigation light control and monitoring panel
Mounting	Flush mounting in the bridge console
Front dimensions (W × H × D)	210 × 159 × 39 mm
Panel cut-out (W × H)	192 × 142 mm
Weight	750 g
DISPLAY	
Screen	7-inch colour LCD, touchscreen
Resolution	800 × 480 pixels
Brightness	1000 nits, sunlight readable
Display modes	Day / night
Screen dimming	Adjustable
POWER SUPPLY	
Supply voltage	24 VDC
Supply source	From the SF-16B module (24 VDC +/− together with the RS-485 line)
COMMUNICATION	
Light module link	RS-485 (A, B) to the SF-16B navigation light module
Ethernet (optional)	Connection to the AMS: switching of the lights and alarm monitoring from the AMS
FUNCTIONS	
Light control	Individual lights and light groups (navigation, NUC, all lights off)
Main / spare lamp	Automatic changeover by the NLC
Light dimming	Naval vessels only
Vessel mimic	Configured for each vessel
Alarm indication	Internal buzzer and visual indication
Alarm log	Alarms are recorded in a log
Supply monitoring	Main and emergency 24 VDC supply status
ENVIRONMENT	
Protection class	IP56
Installation	Indoor
COMPLIANCE & CERTIFICATION	
Type approval	MED certified

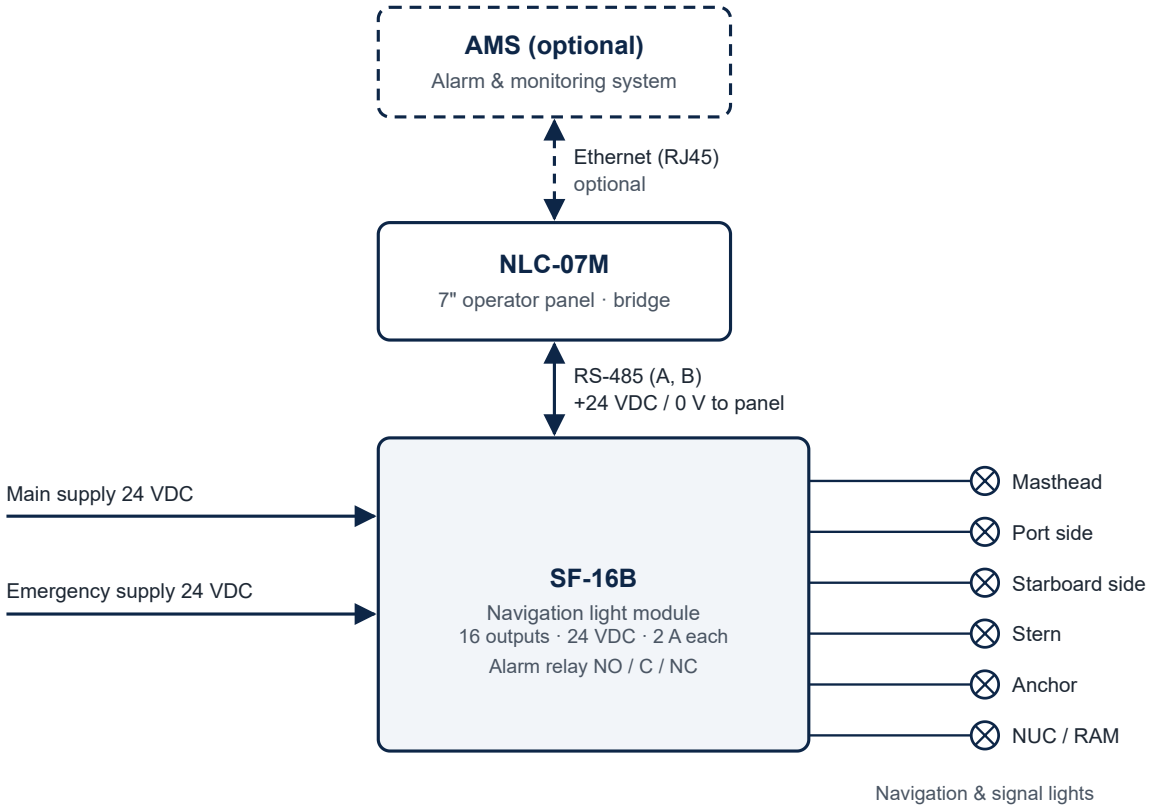
OPERATOR INTERFACE



1	**Light dimming**	Slider for the brightness of the navigation lights (0–100). Naval vessels only.
2	**Screen dimming**	Slider for the display brightness (0–100); day and night mode.
3	**Vessel mimic**	Every light at its position on the vessel, with its live status. The mimic is configured for each vessel.
4	**M.O.B**	Man overboard button.
5	**NUC mode**	Switches the not-under-command light group.
6	**Navigation mode**	Switches the navigation light group for the vessel underway.
7	**Nav. light list**	List of all connected lights and their status.
8	**All light off**	Switches all navigation lights off.
9	**Alarm list**	Active alarms and the alarm log.
10	**Main power**	Status of the main 24 VDC supply.
11	**EMG power**	Status of the emergency 24 VDC supply.
12	**ACK**	Acknowledges alarms.

Screen shown: example vessel configuration. The mimic and the light list are configured for each vessel.

SYSTEM LAYOUT & CONNECTION

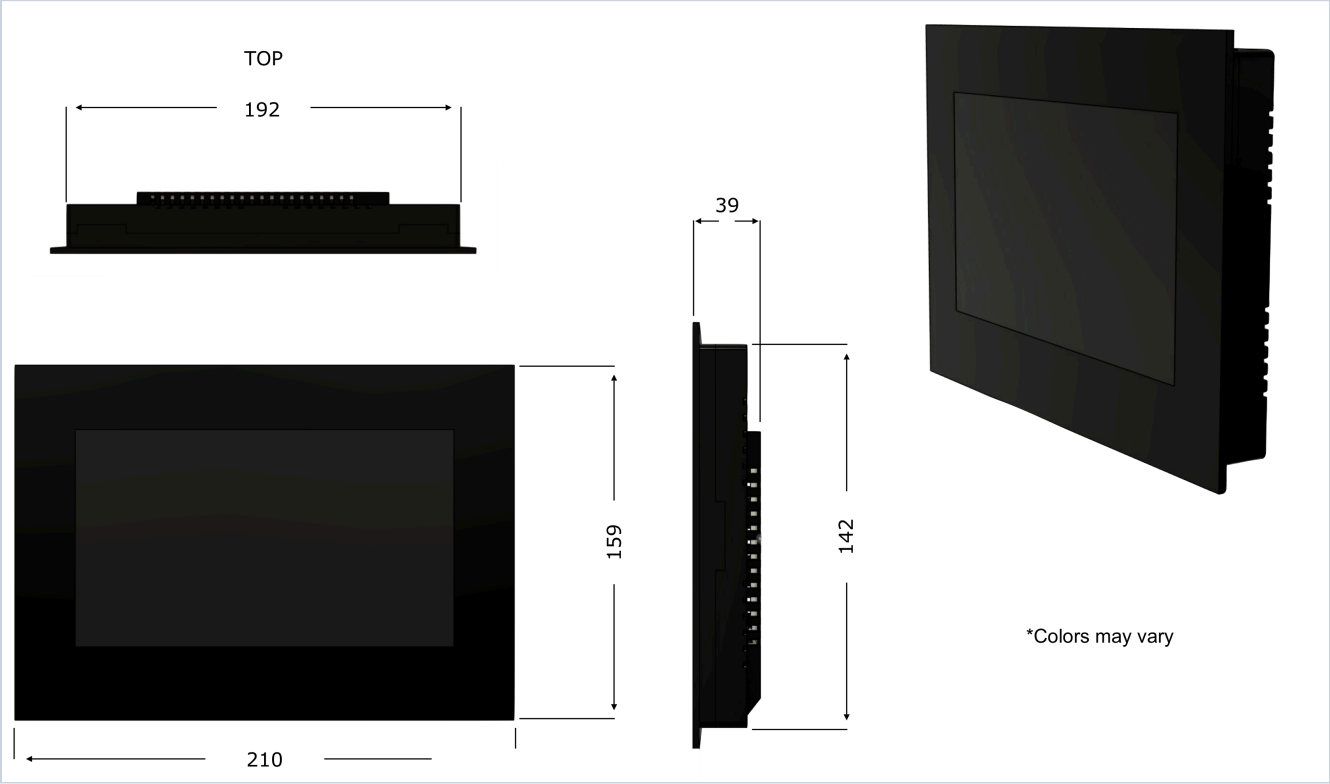


Panel connections

Terminal	Function
A	RS-485 – A (to SF-16B “PANEL INPUT” A)
B	RS-485 – B (to SF-16B “PANEL INPUT” B)
+	24 VDC supply from the SF-16B – positive
–	24 VDC supply from the SF-16B – return
Ethernet (RJ45)	Connection to the AMS (optional)

The light outputs, power inputs and alarm contacts of the module are described in the SF-16B data sheet (document SF-16B-DS).

MECHANICAL DRAWINGS



Top, front and right side views. All dimensions in millimetres. Drawing no. 302112. *Colours may vary.

MOUNTING	
Front panel	210 × 159 mm
Depth	39 mm
Panel cut-out	192 × 142 mm
Weight	750 g

INSTALLATION	
Mounting	Flush, bridge console
Location	Indoor
Protection	IP56