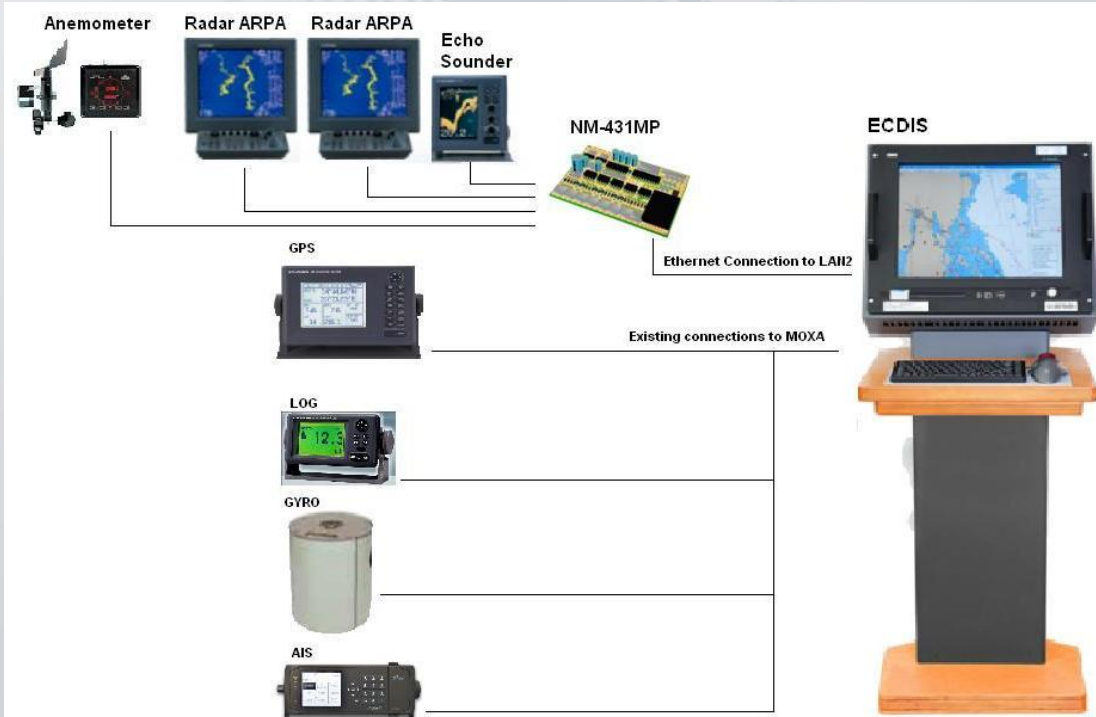


### Description

The NM-431MP is a multiport IO interface featuring four optically isolated input ports, three RS-422 signal level output ports, one RS-232 signal level IO port (shared with input 1) and a Serial over Ethernet IO port. The NM-431MP interface is intended for use with computer based marine systems such as ECDIS, SVDR/VDR and Conning systems where NMEA-0183 data must be acquired from multiple sources such as GPS, Gyro, Log, AIS, Radar ARPA, Echo Sounder, Wind instrument and BNWAS. The connection to the computers is achieved via the Serial over Ethernet Interface with the use of a single CAT5 cable, either by creating four virtual serial ports or directly to four user selectable UDP sockets for application supporting this feature.

### Typical Application



## Specifications

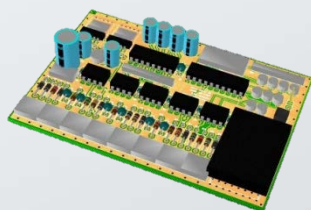
|                                |   |
|--------------------------------|---|
| <b>Supply Voltage</b>          | 9 to 35 VDC   |
| <b>Power Supply Protection</b> | PTC Resettable Fuse<br>Vmax: 60V, Imax: 40A, Ihold: 0,3A (23°C),<br>Itrip:0,6A (23°C), Max time to trip (23°C): 3sec for 1,5A   |
| <b>Current Consumption</b>     | 50mA in idle state/ 150mA in full output mode   |
| <b>Inputs</b>                  | 4 x NMEA-0183   |
| <b>Input Resistance</b>        | 1 KOhm  |
| <b>Input Protection</b>        | Optically Isolated - Common Mode Rejection: 10kV/usec, Isolation: 480 Vrms  |
| <b>Outputs</b>                 | 3 x buffered RS-422<br>1 x RS-232 (shared with input 1)<br>1 x Serial over Ethernet Interface (4 inputs / 3 outputs from virtual serial ports or UDP sockets on target computer system) |
| <b>Output protection</b>       | Buffered for all RS-422 outputs   |
| <b>Speed for NMEA inputs</b>   | 4.800-38.400/8/N/1  |
| <b>Speed for NMEA outputs</b>  | 4.800-38.400/8/N/1  |

|                   |   |
|-------------------|---|
| <b>Indicators</b> | 4 x LED for the input ports<br>3 x LED for the output ports<br>1 x LED for the 5 VDC board power supply<br>1 x LED for the 3,3 VDC board power supply |
|-------------------|---|

**Housing** PCB Holder with Din Rail or Panel Mount option

### Dimensions

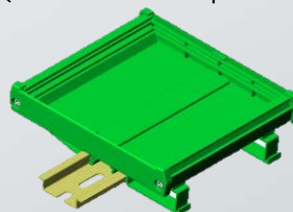
PCB:



Width = 104.5mm  
Depth = 73mm

Enclosure

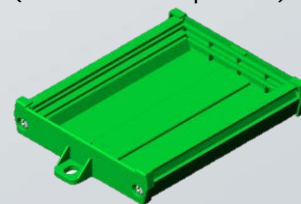
(Din Rail Mount option 1):



Width: 107.5 mm  
Depth: 88 mm  
Height: 53 mm

Enclosure

(Panel Mount option 2):



Width: 107.5 (124.4) mm  
Depth: 88 mm  
Height: 40 mm

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