WIND INDICATORS

A NEW STANDARD IN BRIDGE INDICATION

Wind measuring solutions for any marine application

The new XDi-N comes with a preinstalled standard wind indicator library containing a selection of virtual wind indicators to choose from. Available in three different physical sizes, the wind indicator series works perfectly with ind sensors providing standard NMEA. The XDi-N wind indicatorts is also able to support analogue wind sensor input.

Simply combine your wind sensor with one or more of the XDi-N wind indicators to form the exact wind measuring system you need.

► XDi 96 N is the perfect choice when panel space is limited; despite the small size, the bright colour display provides a surprisingly good viewing distance.

► XDi 144 N can be used in the control panels or in the overhead consoles.

► XDi 192 N is perfect for overhead panels, where the large colour display offers long distance viability.

Optimised panel space – customised display designs

The increased complexity of modern ships has made panel space a limited resource. Benefit from the modular design of the XDi series to obtain an outstanding bridge design while reducing the need for panel space. Or have your own fully customised library created – containing virtual indicators with a unique graphical design perfectly matching other indicators or displays in your product line (for instance propulsion indicators).This makes it possible to offer a uniform bridge design to shipyards and shipowners.

Built for navigation system integration

Developed with system integration in mind, the XDi-N series comes with flexible NMEA interface and two CAN ports, supporting CANopen with the unique XDi-net plug and play layered on top. Using a modular interface extension concept, extension modules can be added to indicators.

In plain terms, this is yet another game-changing solution from DEIF.

Flexible display indicator – wind

Flexible wind system solution in control

The XDi Navigation version (XDi-N) is the top model of the XDi series of display-based indicators. Compact, easy-to-install, versatile and user-friendly, the complete range of XDi bridge indicators takes the well-known DEIF qualities in both product performance and logistic handling to a new level.

The ultimate all-in-one solution, the XDi-N saves you panel space and installation time, gives you greater choice, more flexibility and the ability to configure and make repairs on-site.

XDi-N main wind indicator

The XDi-N main indicator is delivered with one NX2 NMEA input/output (I/O) module that in most cases covers all the needs for NMEA I/O. Adding one extra NX2 extension module on the XDi 144 N or XDi 192 N adds another set of I/O ports.

XDi-N wind repeater

The XDi-N wind repeater indicator has the same functions as the main unit, use exactly the same indicator library, but receives data via CAN bus (XDi-net), and therefore no NMEA extension module is required.

NMEA data interface

The standard input for XDi navigation indicators are NMEA data in compliance with IEC 61162-1. Supported NMEA data for wind indicators:

► Relative wind speed and direction
► True and geographic true wind speed and direction
► Heading, water speed, speed over ground, longitudinal speed for true/geographic wind calculations

XDi-N features

► TFT graphical LED 3.5, 5 or 7" display
► 96, 144 or 192 DIN cutouts
► Two CAN ports for easy interfacing
► XDi-Net – add multiple XDi indicators
► Redundant power inputs
► Compatible with wind sensors providing NMEA data
► Up to six NMEA compatible inputs
► Up to four NMEA outputs
► Relative, true & geographic wind indication
► Toggle between up to four predefined indicator screens
► Quick-switch between wind speed measuring units (knots, m/s or m/h, km/h, beaufort)
► Dimmer controllable using front/external push-buttons, analogue, NMEA or CAN/XDi-net
► Standard day and night designs
► Customised indicator designs available on request
► Optional analogue or digital input
► Optional wind warning and alarms/relay output
► Optional IP66 protection

Variants	Extension modules
XDi-N Main	NX2
XDi-N Repeater	None required

Accessories

► Dimmer potentiometer kit
► AX1 analogue extension module
► DX1 digital extension module
► NX1 NMEA output extension module
► NX2 NMEA I/O extension module
► Front frames

Approvals

ABS   CSS   DNV-GL   RS   CNK

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Variants & extension modules

Solutions customised to your requirements

Variants

XDi-N Main Wind Indicator
With NX2 NMEA input/output module
(share data on XDi-net).

XDi 96 N   XDi 144 N   XDi 192 N

XDi-N Wind Repeater
Input: XDi-net
No NX2 input/output module required.
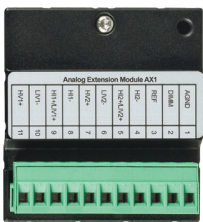

XDi 96 N   XDi 144 N   XDi 192 N

Extension modules

Maximum one extension module for XDi 96 and two for XDi 144/192.
The 'quick snap-on' extension modules can be delivered separately or together with your XDi unit.

AX1
Analogue inputs, dimmer input and
reference output for external potentiometer
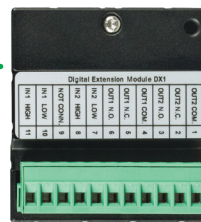
DX1
Digital inputs, e.g. for RPM pick-up sensors.
Relay outputs for external alarm/control
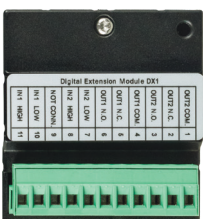
NX1
NMEA0183 output module for data transfer to
VDR, DP system or navigation system. Two
contact inputs for remote push button control.

NX2
NMEA0183 serial I/O module for integration in
ship navigation systems. Two contact inputs for
remote push button control.

Standard relative wind indicator system

NX2

WIND INDICATOR
Relative wind

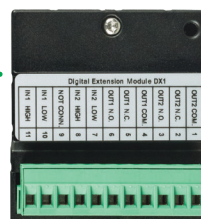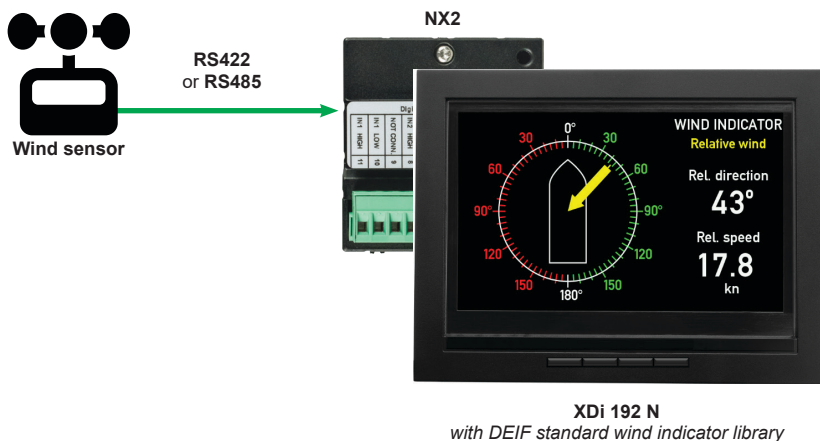Rel. direction
43°

Rel. speed
17.8
kn

XDi 192 N
with DEIF standard wind indicator library

The RS422 or RS485 port on the XDi is used to receive NMEA 0183 data from the wind sensor

Advanced wind system - Relative, True, Geographic with NMEA output

Wind sensor

RS422 or RS485

NX2

NMEA
Speed and heading

Input

RS422

External button control

WIND INDICATOR
Relative wind
43°
17.8kn
True wind
90°
11.2kn
Sc.3

WIND INDICATOR
Relative wind
Rel. direction
43°
Rel. speed
17.8
kn

NMEA out
RS422

VDR

Aft bridge

Forward bridge

More XDi-net

Two XDi 192 N indicators with DEIF standard wind indicator library.

Toggle between screens showing relative, true and geographic true wind speed and direction

Advanced wind system - Relative, True, Geographic with NMEA output

Wind sensor

RS422 or **RS485** (NMEA 0183)

NX2

NX2

WIND INDICATOR
Relative wind
Rel. direction
-137°
Rel. speed
17.8
kn
Sc.1

WIND INDICATOR
Relative wind
Rel. direction
43°
Rel. speed
17.8
kn

Bridge 1

Bridge 2

Bridge 1

Bridge 2
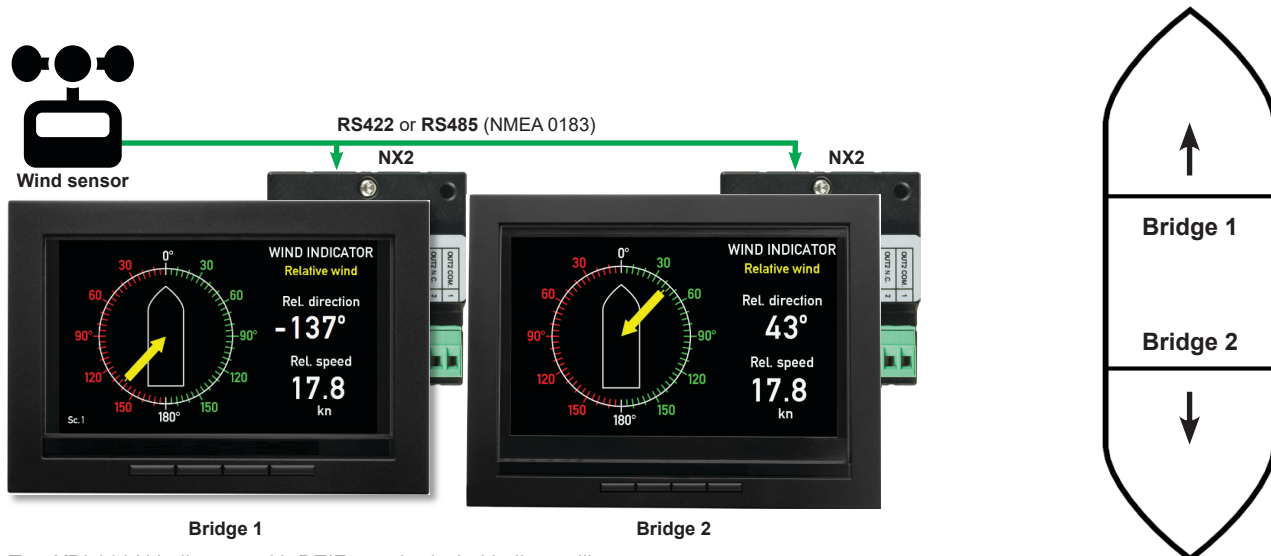
Two XDi 144 N indicators with DEIF standard wind indicator library.

This system is setup with a 180 degree offset in the wind direction to be used on this type of ferry. Setup details can be found in the wind sensor application note on deif.com

Customized relative wind indicator system

Wind sensor

The sensor output can be voltage or current

Analogue

AX1

RELATIVE WIND

SPEED | DIRECTION

25.3 m/s   49.2 knots

XDi 192 N
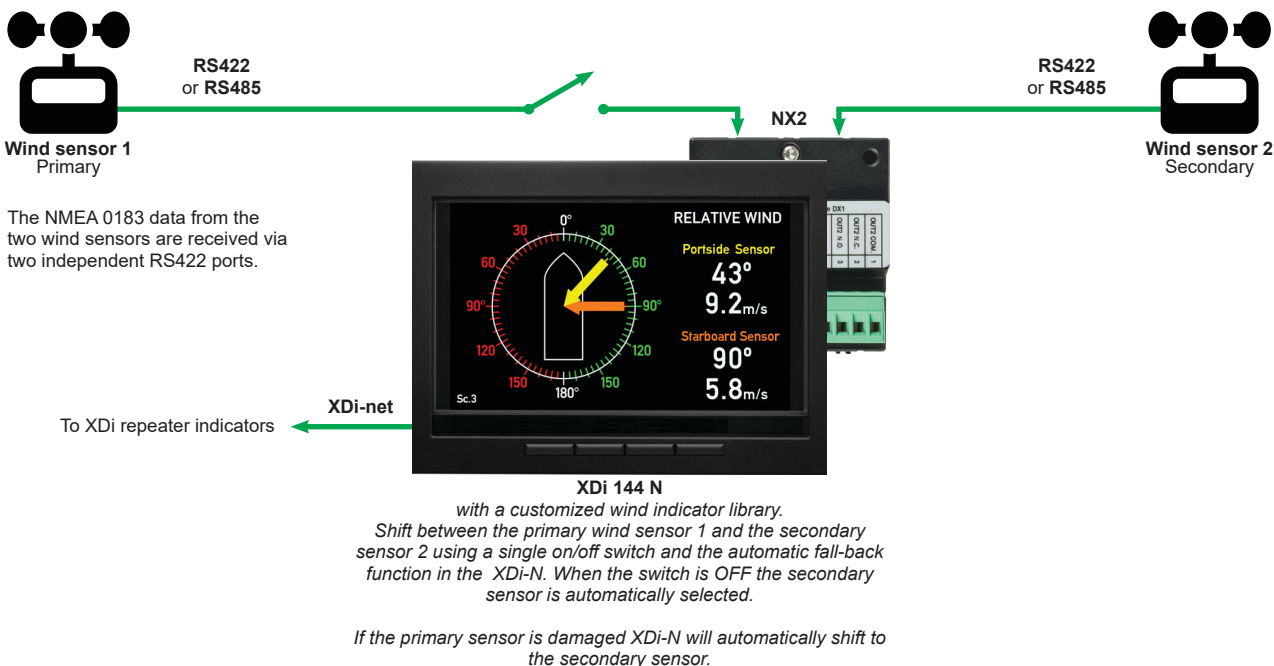*with a customized library.*
Unique indicator design and analogue sensor interface

Customized wind system with two wind sensors

Wind sensor
Portside

RS422
or **RS485**

The NMEA 0183 data from the two wind sensors are received via two independent RS422 ports.

NX2

RS422
or **RS485**

Wind sensor
Starboard

RELATIVE WIND

Portside Sensor
43°
9.2m/s

Starboard Sensor
90°
5.8m/s

Sc.3

XDi-net

To XDi repeater indicators

XDi 144 N
with a customized wind indicator library.
Toggle between screens showing wind data from Portside,
Starboard or both sensors in a combined screen.

Customized wind system with two wind sensors

Wind sensor 1
Primary

RS422
or **RS485**

The NMEA 0183 data from the two wind sensors are received via two independent RS422 ports.

NX2

RS422
or **RS485**

Wind sensor 2
Secondary

RELATIVE WIND

Portside Sensor
43°
9.2m/s

Starboard Sensor
90°
5.8m/s

Sc.3

XDi-net

To XDi repeater indicators

XDi 144 N
with a customized wind indicator library.
Shift between the primary wind sensor 1 and the secondary
sensor 2 using a single on/off switch and the automatic fall-back
function in the XDi-N. When the switch is OFF the secondary
sensor is automatically selected.

If the primary sensor is damaged XDi-N will automatically shift to
the secondary sensor.

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LEARN MORE AT WWW.DEIF.COM/MARINE-OFFSHORE