



# Master Node Instrument (MNI) - NMEA2000



## NexSysLink® CAN Instruments Product Family



### Product Description

This NexSysLink® instrument reads and processes NMEA 2000® compliant CAN messages and/or analog sender data. The instrument can transmit data to a maximum of 16 minor gauges via a three-wire daisy-chain harness.

The sunlight visible transfective LCD displays operating parameters along with fault and warning conditions.

An intuitive menu driven user interface allows for quick configuration of the instrument and display parameters.

### Product Features

- NMEA2000 certified CAN protocol support
- Large transfective dot matrix LCD
- Advanced stepper motor technology
- Supports up to three discrete analog sender
- Displays faults and warnings inputs including NMEA 0183 (GPS/Smart Transducer)
- Drives up to sixteen Slave Node Instruments (SNI)
- Expandable to ten analog inputs using
- Factory custom configurations and setups Analog Slave Node Instruments (ASNI)
- Bright LED illumination
- Bold, easy to read graphics
- Domed or flat glass lenses
- Environmentally sealed connectors

### Product Type and Range

Tachometer	Speedometer
0-4000 RPM	0- 30 MPH
0-6000 RPM	0- 50 MPH
0-8000 RPM	0- 85 MPH
	0-145 MPH

Custom ranges available

### Gauge Size

3 Inch (Fits a 3.375 inch hole)

### Customizable Features

Bezel profile, material and finish

Dial face graphics and colors

Company logo

Pointer cap and blade color

Trim ring color

Illumination color

Contact us for free information about our complete line of NexSysLink® products.

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Made in the USA

### Protocol Compliance

NMEA 2000®

### Environmental Specifications

Shock (Non-operating):

50G, 9-13mS half-sine,  
25 shocks in each of three orthogonal axes

Vibration (Non-operating):

0.06" (1.5mm) double amplitude 10-80-10 Hz  
2 hours in each of three orthogonal axes

Temperature:

Operating, -20°F to 158°F (-30°C to 70°C)  
Storage, -40°F to 185°F (-40°C to 85°C) 50% RH

Humidity:

95% relative humidity @110°F (43°C) non-condensing

Salt Spray:

Meets or exceeds ASTM 117, 48 hours

### Electrical Specifications

Reverse Polarity Protection:

Standard entire system

Load Dump:

Meets SAE J1113, 3 positive 80V transients  
one minute intervals

Operating Voltage:

11-16VDC standard

Over Voltage:

Withstands 18V continuously for one hour

Accuracy:

±2% of input signal

Illumination:

PWM LED backlight  
Color, red, standard

LCD:

Transflective FFSTN dot matrix  
negative image mode standard  
(white characters, black background)  
12:00 O'clock viewing angle  
LED illuminated. Color, white

### Mechanical

Bezel Material:

Stainless steel or aluminum  
Finish, customer specified

Case:

White thermoplastic copolymer

Dial:

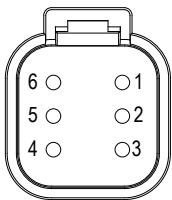
Textured finish polymer  
Backlit graphics, opaque background

Pointer:

Illuminated orange blade with  
gray cap standard

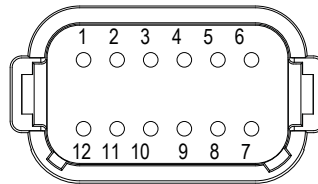
Sealing:

Window sealing IP 65 compliant



6 Pin Connector Detail  
Mates with Deutsch I.P.D.  
DT Series Connector  
DT-06-6S  
Locking Wedge W6A

Beede Serial Bus Connector (6 Pin)	
Pin Number	Connection Name
1 & 6	Battery +
2 & 5	Ground
3 & 4	Serial Data



12 Pin Connector Detail  
Mates with Deutsch I.P.D.  
DT Series Connector  
DT-06-12SA  
Locking Wedge W12SA

Power and Signal Connector (12 Pin)	
Pin Number	Connection Name
1	Switched Battery (Ignition Key On)
2	System Ground (Switch Common, Analog Input Ground)
3	CAN - L
4	CAN - H
5	Lamp Input
6	Battery (24/7)
7	Analog 1 Input
8	Analog 2 Input
9	Analog 3 Input
10	Up Switch (External)
11	Down Switch (External)
12	Mode Switch (External)

16-20 AWG stranded copper wire recommended for all electrical connections.

## Product Outline Drawing

Mounting hole size:  
Ø3.380±.015"  
(Ø85.85±0.38mm)

Mounting hardware torque:  
6 lb-in  
(0.68 N-m) max.

Refer to the appropriate  
Beede installation instruction  
sheet for complete installation  
requirements.

Dimensions shown are in inches.

