



# 2" DPF Display - SAE J1939 - Tier 4

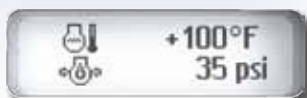


Tier 4  
Compliant  
Start-up Screen

Single Parameter  
Display



Dual Parameter  
Configurable



## Features and Benefits

- SAE J1939 CAN protocol support
- Compact packaging
- 32 X 128 dot matrix graphic LCD
- Displays active and stored faults (SAE J1939 DM1 & DM2)
- Single or Dual Line Display
- Three discrete LED indicators
- Alarm output capable of switching up to 150 mA
- Built in audible alarm (mutable)
- Built-in, sealed, tactile rubber keypad
- Bright, adjustable LED illumination
- Environmentally sealed connectors

## Product Description

The NexSysLink® CAN Bus display instrument reads and processes SAE J1939 compliant CAN messages then displays the CAN message parameter values on a two-line dot-matrix LCD.

The instrument's small footprint, LCD information display and alert LEDs make it a versatile tool for use in various locations of a vehicle or engine powered equipment such as the engine compartment where users or service technicians require a real-time convenient display of engine operating information.

Applications for the instrument includes fire apparatus pump panels, portable power and compressor units as well as fixed engine applications.

The sunlight visible transfective LCD displays operating parameters and is complemented by three discrete alert LED's.

An intuitive menu driven user interface accessed by three built-in tactile switches allows for easy display configuration.

Stand-alone and Master Node (MNI) configurations available. MNI configuration drives the SNI and ASNI instruments.

## Customizable Features

Bezel profile, material & finish

Dial face graphics & colors

LCD Illumination color

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Made in the USA

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## NexSysLink® CAN Instruments Product Family

Contact Faria Beede for more information  
about our NexSysLink® products.

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# SCR Indicators

## Diesel Particulate Filter (DPF) Indicator Operation

*Instrument Shown with DPF Icon Activated*



*Instrument Shown with DPF Icon Activated and Warn Lamp On*



*Instrument Shown with DPF Icon Activated and Fault Lamp On*



DPF Indicator Operation Chart 1			
SPN	FMI	Icon Displayed	Indicator Warning Lamp
3251	15	DPF On - Solid	None
3251	17	DPF On - Solid	None
3719	15	DPF On - Solid	None

DPF Indicator Operation Chart 2			
SPN	FMI	Icon Displayed	Indicator Warning Lamp
3251	16	DPF On - Blink	Amber Warn - Solid
3719	16	DPF On - Blink	Amber Warn - Solid

DPF Indicator Operation Chart 3			
SPN	FMI	Icon Displayed	Indicator Warning Lamp
3251	0	DPF On - Blink	Red Fault - Solid
3719	0	DPF On - Blink	Red Fault - Solid

## Regen Inhibit Indicator Operation

*Instrument Shown with Regen Inhibit Icon Activated*



Regen Inhibit Indicator Operation Chart			
SPN	Bit State	Icon Displayed	Indicator Warning Lamp
3703	00	None	None
	01	Regen Inhibit On - Solid	None

## Exhaust System High Temperature (HEST) Indicator Operation

*Instrument Shown with HEST Icon Activated*



HEST Indicator Operation Chart			
SPN	Bit State	Icon Displayed	Indicator Warning Lamp
3698	000	None	None
	001	HEST On - Solid	None

• Stand-alone CAN Display Implementation of SAE J1939 Parameters

Parameter Name	SPN	PGN	LCD Display Name
Fuel Level 2	38	65276	Fuel Level 2
Engine Throttle Position	51	65266	Throttle
Engine Intercooler Temperature	52	65262	Intercooler Tmp
Wheel-Based Vehicle Speed	84	65265	Vehicle Speed
Power Takeoff Oil Temperature	90	65264	PTO Oil Temp
Accelerator Pedal Position 1	91	61443	Accel Pedal %
Engine Percent Load At Current Speed	92	61443	Percent Load
Engine Fuel Delivery Pressure	94	65263	Fuel Pressure
Fuel Level 1	96	65276	Fuel Level 1
Engine Oil Level	98	65263	Eng Oil Level
Engine Oil Pressure	100	65263	Eng Oil Pressure
Engine Intake Manifold #1 Pressure	102	65270	Boost Pressure
Engine Intake Manifold 1 Temperature	105	65270	Manifold Temp
Engine Coolant Pressure	109	65263	Coolant Pressure
Engine Coolant Temperature	110	65262	Coolant Temp
Engine Coolant Level	111	65263	Coolant Level
Net Battery Current	114	65271	Battery Current
Transmission Oil Level	124	65272	Trans Oil Level
Transmission Oil Pressure	127	65272	Trans Oil Press
Charging System Potential	167	65271	Alternator Volts
Battery Potential/Power Input 1	168	65271	Battery Volts
Engine Exhaust Gas Temperature	173	65270	Exh Gas Temp
Engine Fuel Temperature 1	174	65262	Fuel Temp
Engine Oil Temperature 1	175	65262	Eng Oil Temp
Transmission Oil Temperature	177	65272	Trans Oil Temp
Engine Fuel Rate	183	65266	Fuel Rate
Engine Instantaneous Fuel Economy	184	65266	Fuel Economy
Engine Average Fuel Economy	185	65266	Avg Fuel Econ
Power Takeoff Speed	186	65264	PTO Speed
Engine Speed	190	61444	Engine Speed
Total Vehicle Distance	245	65248	Vehicle Dist
Engine Total Hours of Operation	247	65253	Engine Hours
Transmission Current Gear	523	61445	Current Gear
Red Stop Lamp	623	65226	N/A (Fault LED)
Amber Warning Lamp	624	65226	N/A (Warn LED)
High Resolution Total Vehicle Distance	917	65217	Vehicle Dist
Engine Wait to Start Lamp	1081	65252	Wait/Start Lamp
MIL Lamp	1213	65226	N/A (MIL LED)
Hydraulic Temperature	1638	65128	Hydraulic Temp
Aftertreatment 1 SCR Catalyst Tank Level	1761	65110	DEF Level
Hydraulic Oil Level	2602	65128	Hydr Oil Lvl
Aftertreatment 1 SCR Catalyst Tank Temperature	3031	65110	DEF Temp
Aftertreatment Diesel Particulate Filter Differential Pressure	3251	64946	DPF Icon Only
Aftertreatment 1 SCR Catalyst Reagent Type	3521	64923	DEF Property
Exhaust System High Temperature Lamp Command	3698	64892	HEST Icon Only
Diesel Particulate Filter Regen Inhibit	3703	64892	Regen Inhibit Icon Only
Diesel Particulate Filter 1 Soot Load Percent	3719	64891	DPF Soot Load



### 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

### Mounting Specifications

Mounting hole size:  $\varnothing 2.125 \pm .015"$  ( $\varnothing 53.98 \pm 0.38\text{mm}$ )  
 Mounting hardware torque: 6 lb-in (0.68 N-m) max.  
 Refer to the appropriate Beede installation instruction sheet for complete installation requirements.

### 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  
 Output Signal Switching: 150 mA Max.  
 LCD:  
 Transflective FSTN dot matrix  
 positive image mode standard  
 6:00 O'clock viewing angle  
 LED illuminated. Color, white

### Connector Specifications

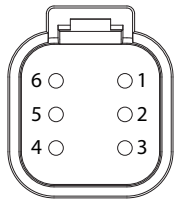
Mates with Deutsch I.P.D. DT Series connector  
 DT-06-6S, Locking wedge W6S  
 16-20 AWG stranded copper wire recommended.

### Mechanical

Bezel Material:  
 Stainless steel or aluminum  
 Finish, customer specified  
 Case:  
 White thermoplastic copolymer  
 Dial:  
 Textured finish polymer  
 Opaque characters & background  
 Sealing:  
 Front sealing IP 67 compliant

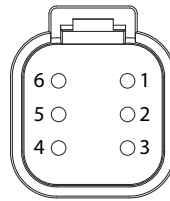
## Wiring Connections

### Stand-Alone Configuration Connections



Connector Wiring Table	
Pin Number	Connection Name
1	Battery +
2	Ground
3	Switched Output
4	Lamp (B+)
5	CAN-H
6	CAN-L

### Master Node Configuration Connections\*



Connector Wiring Table	
Pin Number	Connection Name
1	Battery +
2	Ground
3	Serial Data
4	Switched Output
5	CAN-H
6	CAN-L

\*Master Node configuration capable of driving up to 16 Slave Node (SNI) or Analog Slave Node (ASNI) NexSysLink® gauges.

## Product Outline Drawing

Mounting hole size:  
 $\varnothing 2.125 \pm .015"$   
 ( $\varnothing 53.98 \pm 0.38\text{mm}$ )  
 Mounting hardware torque:  
 6 lb-in  
 (0.68 N-m) max.

Dimensions shown are in inches.

