

Axle Transducer System

FEATURES

- Up to 2% of net payload
- Gross/Net weight displayed with no driver interaction
- Axle group weight displayed with no driver interaction
- Quick and easy installation
- Self-diagnostic
- Two-step calibration
- Optional:
 - Remote display using free smartphone application
 - Printer
 - Scoreboard



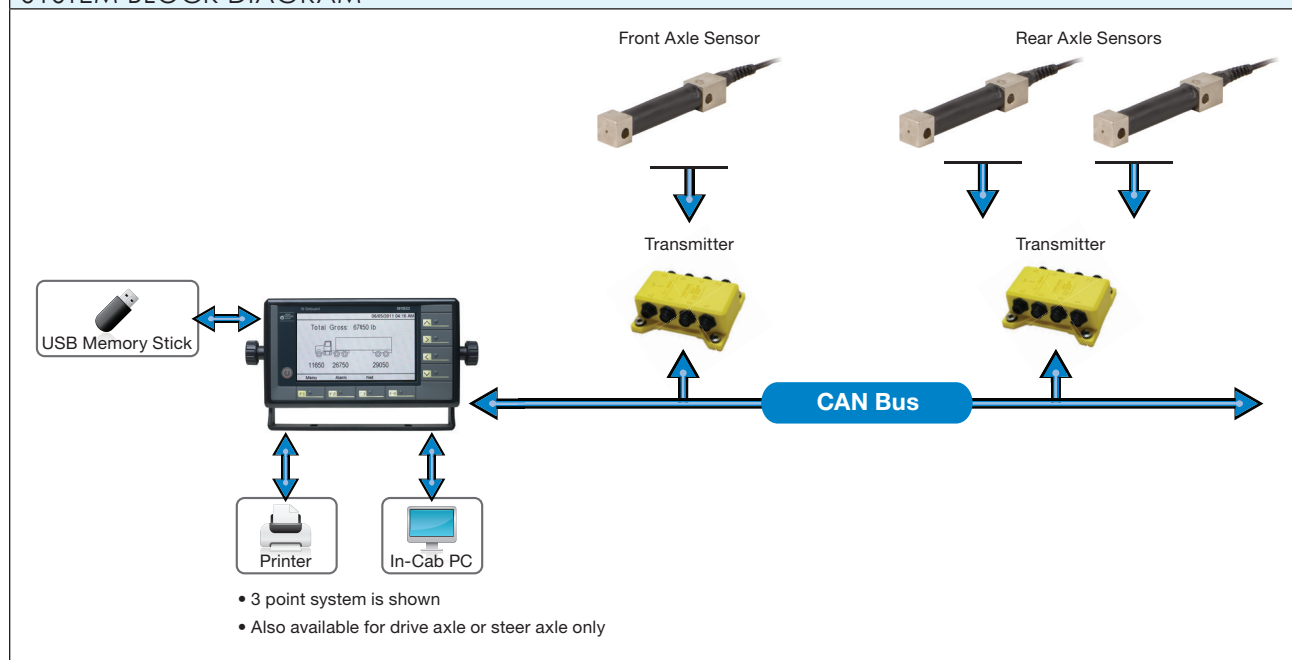
APPLICATIONS

- Bulk hauling
- Dump truck
- Roll offs
- Forestry
- Waste
- Aggregate
- Agriculture
- Any straight truck

DESCRIPTION

The Axle transducer differential housing mounted scale is designed to provide gross vehicle weight, net payload weight and axle group weights. This information is used in avoiding overload fines, choosing disposal sites, and reducing truck maintenance and liability.

SYSTEM BLOCK DIAGRAM



Axle Transducer System On-Board Scale



Axle Transducer System

SPECIFICATIONS					
PARAMETERS		MIN.	TYP.	MAX.	UNIT
Accuracy		Up to 2%			
Capacity (GVW)		Unlimited			
Number of load cells		2,3 or 4			
Number of transmitters per system		1 or 2			
Number of channels		1 or 2			
METER					
Display		4.3", 480x272, graphic color TFT with LED backlight			
Size		160 x 85 x 25 (W x H x D) 6.3 x 3.34 x 1 (W x H x D)		mm inch	
Count by (Divisions)		1, 10, 20, 50, 100			
Weighing units		Pounds (lb) or kilograms (kg)			
Communication		RS232, USB, CAN Bluetooth dongle for smartphone remote control application (Optional)			
Inputs /outputs	Digital inputs	2			
	Digital outputs	2, solid state, short circuit proof. Triggers: • Alarm condition • Programmable set point level reached (overload or target payload)			
Expansion slots		2			
Audible alarm		75			dB
Setup and calibration		Protected by password			
Remote display		Smartphone application* using Bluetooth link to the meter *Android-based phones, iOS-based phones in development			
Power	Operating voltage	10.5		32	VDC
	Current consumption		40	95	mA
Environmental conditions	Shocks and vibration	Suitable for in-cab automotive environment			
	Humidity (non-condensing)	30		85	% R.H.
	Operating temperature	-4		158	°F
		-20		70	°C
	Storage temperature	-4		185	°F
-20			85	°C	
Protection level		IP20			
TRANSMITTER					
Number of load cells		2	4	6	
Sample rate (per load cell)		1			kHz
Load cell excitation voltage		5			VDC
Load cell input range		3			mV/V
Offset drift		10			PPM/°C
Gain drift		5			PPM/°C
Tilt measurement accuracy		0.2			Deg.
Communication		CAN			
Diagnostics		Extensive diagnostics of load cells, hardware and communication			
Power	Input voltage	10.5		32	VDC
	Current consumption /6 load cells			120	mA
Environmental conditions	Shock and vibrations	Per ISO 16750-3 standard			
	Operating temperature	-40		158	°F
		-40		70	°C
	Storage temperature	-40		185	°F
		-40		85	°C
	Humidity		100% condensing		
Protection level		IP67 and IP69K; NEMA 4X			
Resistance to solvent		Per automotive requirements for chassis installed units			
Size		114 x 48 x 140 (W x H x D) 4.5 x 1.9 x 5.5 (W x H x D)		mm inch	
TRANSDUCERS					
Material		17-4 Stainless Steel			
Weight		0.8 lbs; 0.36 kg			
Size		9" L x 1.5" H x 0.25" D			
Output		1.6 to 1.75 mV/V @ 7.7 lbs (3.5 kg)			
Impedance		350 Ω Minimum			