

## Weight Transmitters



### FEATURES

- Microprocessor-based weight transmitter
- Integral multi-cell summing circuit
- Standard digital RS-485 output
- Optional analog 0-10V and 4-20mA outputs
- Optional Modbus RTU or Allen-Bradley remote I/O protocol
- Fault protected transducer excitation

### DESCRIPTION

Self-contained microprocessor based weight transmitters. Both units contain an internal multi-cell summing circuit, 10 or 15 volt excitation, and a digital RS-485 output. Analog 0-10 volt and 4-20 mA outputs are available as an option. DXp transmitters are designed to be field mounted within the standard cable length of the load cells and are available with NEMA 4, 4X, or explosion proof enclosures. The DXp-10 offers 20,000 counts of digital resolution with a response time of 400 milliseconds. For high speed batch and packaging applications, the DXp-15 offers 50,000 counts of digital resolution with a response time of 50 milliseconds.

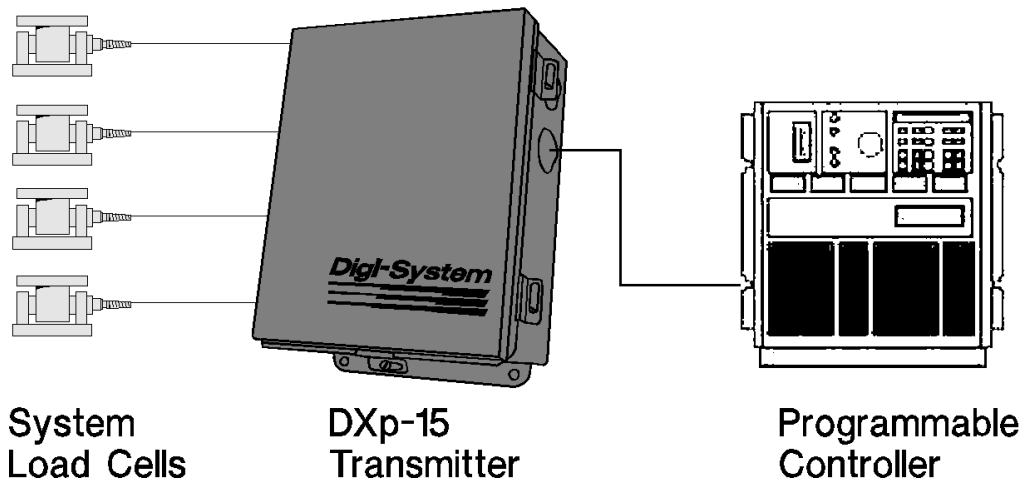
DXp-15 units are available with Allen-Bradley Remote I/O or Modbus RTU protocol for convenient interface with host PLC/DCS systems.

The DXp-10 and DXp-15 transmitters are designed for inventory and process weighing systems requiring transmission of high accuracy weight data to a computer or other control device. Availability of a wide variety of digital interface options simplifies communication of weight data to a host computer or PLC. The result is improved product quality and material control.

### APPLICATIONS

- Inventory weighing
- Process weighing
- Silo, bin, and hopper weighing systems

### CONFIGURATION



## SPECIFICATIONS

### Performance

#### Resolution

DXp-10	20,000 counts
DXp-15	50,000 counts

#### Sensitivity:

DXp-10	1.0 microvolt/count
DXp-15	0.5 microvolt/count
Full Scale Range	25 or 35 mV (selectable)
Dead Load Range	100%
Input Impedance	10 Mohms, min
Load Cell Excitation (Selectable)	10 V for up to eight 350 ohm load cells (250 mA) 15 V for up to six 350 ohm load cells (260 mA)
Linearity	±0.01% of full scale
Humidity	5 to 90% rh, non-condensing
Common Mode Rej.	100 db or better at or below 35Hz
Normal Mode Rej.	100 db or better at or below 35Hz
Conversion Speed	DXp-10 - 400 msec DXp-15 - 50 msec

### Temperature Effects

Span	±2ppm/°C typical, 7ppm/°C max.
Zero	±2ppm/°C
Operating Temperature	-10 to 55°C (12 to 131°F)
Storage Temperature	-20 to 85°C (-4 to 185°F)

### Electrical

Voltage	115/230 Vac ±15% 50/60 Hz
Power	10 watts max
Parameter Storage	EEPROM
EMI/RFI	Shielded from typical industrial interference

### Enclosure

Dimensions (NEMA 4/4X)	11.5x 8.0 x4.3 HxWxD
Explosion Proof	12.875x 10.875x8.188 HxWxD

### Options

#### Isolated Analog Output(S)

Type	12 bit D/A conversion
Voltage	0 to 10 volt (25K ohm min load)
Current	4 to 20 mA (1000 ohm max load)

### Serial Communication

#### Simplex Data Output (Standard)

Interface Type	RS-485 (simplex)
Data Format	Simplex ASCII data 7 Data Bit Even Parity 1 Stop Bit

### Terminal/Computer Interface (Optional)

Interface Type	RS-485 Half Duplex (Standard)
Baud	1200 or 9600
Protocol	ASCII duplex command/ response format

### Approvals

FM (Factory Mutual)	3611 (Class I, II, III; Div. 1, 2; Groups A-G)
CSA	C22.2 (Class I, II, III; Div. 1, 2; Groups A-G)

### Modbus RTU Protocol (DXp-15 Option Only)

See manual TM002 for function codes and register locations.

### Allen-Bradley Remote I/O (DXp-15 Option Only)

See manual TM010 or technical note TD078 for details.

BLH is continually seeking to improve product quality and performance. Specifications may change accordingly.

## Disclaimer

ALL PRODUCTS, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Vishay Precision Group, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay Precision Group"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

The product specifications do not expand or otherwise modify Vishay Precision Group's terms and conditions of purchase, including but not limited to, the warranty expressed therein.

Vishay Precision Group makes no warranty, representation or guarantee other than as set forth in the terms and conditions of purchase. **To the maximum extent permitted by applicable law, Vishay Precision Group disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.**

Information provided in datasheets and/or specifications may vary from actual results in different applications and performance may vary over time. Statements regarding the suitability of products for certain types of applications are based on Vishay Precision Group's knowledge of typical requirements that are often placed on Vishay Precision Group products. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application.

No license, express, implied, or otherwise, to any intellectual property rights is granted by this document, or by any conduct of Vishay Precision Group.

The products shown herein are not designed for use in life-saving or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay Precision Group products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay Precision Group for any damages arising or resulting from such use or sale. Please contact authorized Vishay Precision Group personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.