

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.

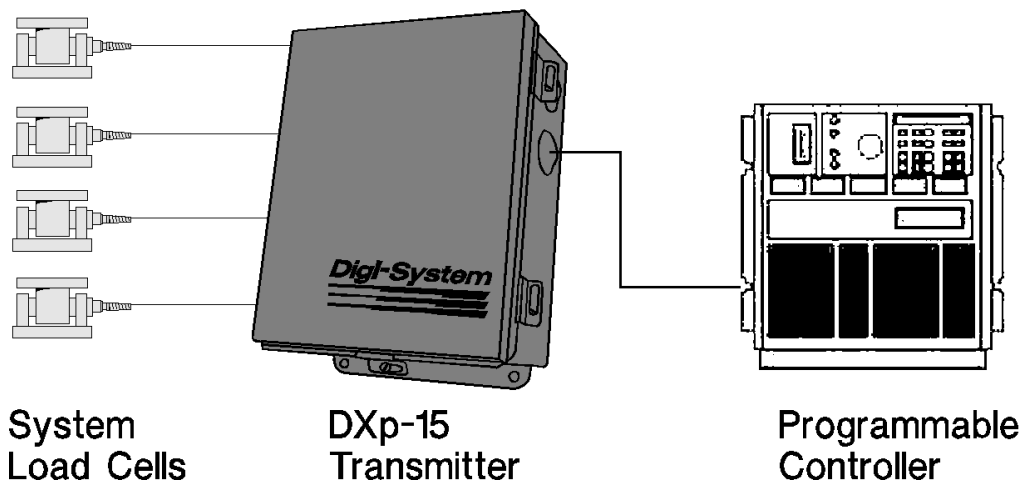
DXp-15 units are available with Allen-Bradley Remote I/O or Modbus RTU protocol for convenient interface with host PLC/DCS systems.

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)

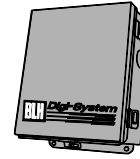
See manual TM010 or technical note TD078 for details.

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

Ordering Specification Code

**DXP-10- [M]-[C]-[P]-[S] Blind Weigh Transmitter
with 20,000 Count Resolution**

**DXP-15- [M]-[C]-[P]-[S] Blind Weigh Transmitter
with 50,000 Count Resolution**



DXP-10 DXP-15

[M] MOUNTING

- | | | |
|---|-----|-----|
| [1] NEMA 4 PAINTED STEEL ENCLOSURE | STD | STD |
| [2] NEMA 4X STAINLESS STEEL ENCLOSURE | | |
| [3] NEMA 7/9 EX ENCLOSURE [Class I II, Div 1 2, Group BCDEFG] | | |
| [8] #1 & FM/CSA Approved [Class I II III, Div 2, Group ABCD FG] | | |
| [9] #2 & FM/CSA Approved [Class I II III, Div 2, Group ABCD FG] | | |

[C] COMMUNICATION

- | | | |
|---|-----|-----|
| [1] RS-485 DIGI-SYSTEM ENABLED | STD | STD |
| [2] #1 & RS-485 ASCII PROTOCOL | N/A | |
| [4] ALLEN-BRADLEY REMOTE I/O (NOTE: [1] & [2] DELETED) | N/A | |
| [5] #1 AND MODBUS RTU PROTOCOL * | N/A | |

[P] PROCESS OUTPUTS

- | | | |
|-----------------------------|-----|-----|
| [1] NO PROCESS OUTPUT | STD | STD |
| [2] 0-10 V & 4-20 mA ANALOG | | |

[S] SOFTWARE

- | | | |
|-------------------------------|-----|-----|
| [1] STANDARD | STD | STD |
| [2] DYNAMIC DIGITAL FILTERING | N/A | |

ACCESSORIES:

- Conduit Fitting Kit (6 connectors) P/N 465231
- Cable Fitting Kit (6 connectors) P/N 465232

* May Require RS-485 to RS-232 Serial Converter. See Section VI