

FDT5000 SERIES FIELD MOUNT TRANSMITTERS DC INPUT, FIXED RANGE



FDT5000: DC Voltage Inputs, 1V or Greater

FDT5030: DC 4/20mA Input

FDT5060: DC Current Inputs (except 4/20mA)

FDT5070: DC Millivolt Inputs, less than 1V

- NEMA 4X Splashproof Enclosure
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3-1/2 Digit Display

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Input Ranges from 4mV to 250Volts, 1mA to 5 Amps

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Nonstandard Ranges Available

- Input/Output Isolation is Standard
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FDT5000-5030-5040-5060 Field Mount Transmitter

Written by Administrator

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Urethane-Coated Circuit Boards

- AC or DC Power Options

[FDT5000/FDT5030](#)

[FDT5060/FDT5070](#)

[PDF](#)

[DATA SHEET](#)

Also see:

[FDT5040](#) : 4/20mA Input with Loop Excitation Supply

FDT5000 Series Field Mount Transmitters provide an isolated DC output proportional to a DC voltage or current input. They are useful for amplifying, reducing, scaling or offsetting signals, for eliminating ground loops and noise problems and for converting currents to voltages or vice-versa. The model numbers listed below reflect a variety of input choices but all share the same basic circuitry, features and specifications.

A rugged NEMA 4X splashproof, corrosion-resistant housing protects the transmitter in outdoor and industrial environments. The circuit boards are urethane coated for protection against condensation and contaminants. FDT5000 Series transmitters include a 3-1/2 digit user-rangeable display to provide local process indication in engineering units.

Model FDT5070 incorporates a low-drift amplifier for millivolt-level inputs. All models use stable, proven circuitry for accurate measurements under varying ambient conditions. Available options include AC and DC power choices and reverse-acting transmitter (decreasing output with increasing input).

For field mount transmitters without a display, select any plug-in transmitter module plus our ENCL-1 NEMA-4X enclosure. (see [Accessories](#) page)

ORDERING INFORMATION

Model Number:

Select from the above list according to your input range. Add suffix A (for example, FDT5000A) for AC p

Display:	Specify display reading at low end and at full scale, incl
Input Range:	Specify any DC voltage or current range allowed by the
Output Range:	Specify any DC voltage or current range allowed by the
Power:	Specify 115Vac, 230Vac, 12Vdc or 24Vdc.
Reverse-Acting Transmitter	(Increasing output with increasing input)
	Change last digit

Loop-Powered Output:	4/20mA “current sink” output stage for connection to de
Conduit Opening:	Standard: None. The enclosure has knockouts. Option

ELECTRICAL CONNECTIONS

Connections are made to 8 terminals within the enclosure:

- 1: Input plus.
- 2: Input minus.
- 3: No connection
- 4: No connection.
- 5: Output plus.
- 6: Output minus.
- 7: Power (AC or, if DC power option, DC plus).
- 8: Power (AC or, if DC power option, DC minus).

DETAILED SPECIFICATIONS

Input Capabilities, Model FDT5000:	Minimum span, +/-250V maximum input. Offset
Input Range,	
Model FDT5030:	4/20mA dc. (62 ohms input resistance. 1.25V drop at full scale.)

Input Capabilities, Model FDT5060:

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1mA minimum span, +/-5 Amps maximum input. Offset ranges are allowed. (Input voltage drop typically

Input Capabilities,

Model FDT5070:[] []

4mV minimum span, 1V maximum span (specify FDT5000 for spans greater than 1V.) Offset ranges are

Voltage Output Capabilities:[] []

1 volt minimum output span, -10 to +15V absolute limit. Offset ranges are allowed. Maximum output load

Current Output Capabilities:[] []

1mA minimum output span, 0 to +25mA absolute limit. Positive offsets are allowed, negative outputs are

Display Capabilities:[]

Low end and full scale readings may be anywhere between -1999 and +1999 counts. A fixed decimal po

Accuracy	(factory calibration)	:	
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+/-0.1% of span or 10 microvolts, whichever is greater.

Adjustability: □ □

Zero and span each are adjustable approx. +/-15% of span.

Linearity: □ □

+/-0.05% of span or better.

Response Time: □ □

Under 100 milliseconds.

Isolation: □ □

3-way (Power/Input/Output) 1,500Vac rms (2,100V peak).

Guaranteed Operating Temperature: □ □

-10 to +60 ° C (14 to 140 ° F).

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Temperature Stability: □ □

+/- (0.02% of span plus 0.3 microvolts) per □ C, or better.

Power Requirements: □ □

AC, 115 or 230Vrms, 50/60Hz, 2.5V-A. DC, 12 or 24V, 2.5W.