



April 1993

Data Sheet 6.10

Description

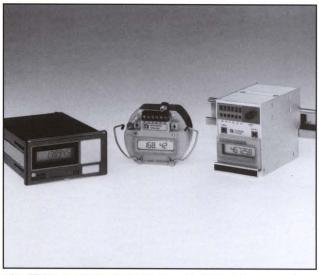
Moore Industries' 2-wire ITX Integrating Totalizer provides a versatile, yet cost-effective method to totalize and display flow rate from a differential pressure transmitter.

The ITX accepts a linear or squared current (4-20mA or 10-50mA) input signal from a pressure transmitter. It accumulates the total, and displays the result in engineering units (e.g., gallons, cubic feet, barrels) on its easy-to-read 8-digit LCD. An integral lithium battery shows the last known input count for up to 6 months in case loop power fails. All input and output configurations, including the choice of square root or linear mode, are configurable via solderless jumpers.

When equipped with the -RI option, the DIN-style ITX comes equipped with a connector that allows rate information and power to be transferred to the Moore Industries' IRX Rate Indicator Module. The DIN-style IRX mounts alongside the ITX to display output rate in percent and reflects either the linear ITX input level or the square root of the input level on its 4-digit display. See the -RI option on the back page for additional information.

Ordering Specifications

To order, use the bold face data from the Ordering Specifications section of the Specifications table. For assistance, refer to the model number example located at the bottom of the table.



The ITX is available in high-density DIN-style, rugged field-mount and compact panel-mount housings allowing installation almost anywhere.

Features

- Field-configurable operating parameters. All combinations of input and output range as well as the choice of linear or square root function can be selected using solderless jumpers.
- Full scale output rates. Output parameters ranging from 6.25 to 51,200 counts per hour make the ITX ideal for a wide range of applications.
- Large, easy-to-read 8-digit LCD. The ITX's LCD is easy to read even in lighted locations.

Certifications



CSA General Location; Explosion-proof, Division I, Groups B, C and D



FM Explosion-proof, Class I, Division I, Groups B, C, and D (refer to FM prefix on enclosures)



CENELEC Flameproof, EExd, IIc T6 (refer to F prefix on enclosures)

SAA Explosion-proof, Ex d IIc T6 IP66 (refer to S prefix on enclosures)



Specifications

Characteristics		Ordering	Specifications		-RI Side panel with wired
Performance	Calibration Capability: For 1% to 100% output span, ±0.1% of span in linear mode; ±0.2% of span in square root mode Count dropout: Adjustable from 1–20% of input span; 1% standard (see -CD option) Protection: Reverse input polarity protected to 400V (not provided with -LV option)	Input	4-20mA or 10-50mA (jumper selectable) Specify the full scale rate at which the display is to be incremented in counts per hour (all ranges are jumper selectable): A4 = 0-6.25 thru 12.5 A3 = 0-12.5 thru 25 A2 = 0-25 thru 50	(continued)	connector enabling DIN- style ITX to provide output and power to the IRX Rate Indicator Module (for IRX specifications and ordering information, consult the factory) -RF RFI/EMI protection rates 50V/m - ABC = 0.1% F.S. when tested accord- ing to SAMA standard PMC 33.1 -RS External terminals replaced by external reset switch
Ambient Temperature	Ambient Range: -18°C to +70°C (0°F to +160°F); display may non-destructively darken above +55°C, total is not affected Effect: ±0.018%/°C (±0.01%/°F) over above		A1 = 0-50 thru 100 A = 0-100 thru 200 B = 0-200 thru 400 C = 0-400 thru 800 D = 0-800 thru 1,600 E = 0-1,600 thru 3,200 F = 0-3,200 thru 6,400 G = 0-6400 thru 12,800 H = 0-12,800 thru 25,600	Housing	-RTB Removable terminal block (DIN housing only) -S Square root function (field-selectable via jumpers) DIN DIN-style rail mount housing (G-type rail)
Adjustments	range Type: External multiturn potentiometers Span: Adjusts to any span in output range Zero: ±10% of span	Power	J = 0-25,600 thru 51,200 7VLP 7 volts loop powered on input side 6.3VLP 6.3 volts loop powered on input side (-LV option required)		HP Hockey-puck housing with spring clips for mounting in an explosion-proof enclosure FL HP housing with flanges for surface or relay track mounting HPD HP housing with
Indicator	Type: 8-digit LCD, 0.315-inch high black digits over reflective background Format: 8 active digits with leading zero supression Range: 0-99,999,999 counts (overflow is indicated by black dot on display) Backup: 6-month lithium cell	Options	-CD Count dropout: level adjusted to other than 1% by factory; adjustable from 1-20% of input span (1% standard) -FA Front accessible terminal block (either -FA or -RA required on DIN) -FR Unit outputs 35 to 180 milliseco		bottom clips for dual mounting in a high cover, glass window explosion-proof enclosure 2LG* HP housing mounted in 2-hub, low dome, glass cover explosion-proof enclosure P Standard 1/8 DIN panel mount housing (Other enclosures also available, consult the factory for details.)
Weight	411 grams (14.5 ounces)		maximum external voltage that may be switched is 24Vdc @ 150mA -LV Low voltage drop		*F (prefix) indicates CENELEC approved (e.g., F2LG). FM (prefix) indicates FM approved (e.g., FM2LG). S (prefix) indicates SAA approved (e.g., S2LG).

When ordering, specify: Unit / Input / Output Range / Power / Options [Housing] Model number example: ITX / 4-20MA / H / 7VLP / -FA -RF -RS [DIN]

United States

Tel: (818) 894-7111 FAX: (818) 891-2816



The Interface Solution Experts

terminal block (either -RA or -FA required on DIN)

-RA Rear accessible

Australia Tel: (02) 525-9177 FAX: (02) 525-7296

Belgium Tel: 03/235.35.44 FAX: 03/271.00.17

Netherlands Tel: (0)344-617971 FAX: (0)344-615920 United Kingdom Tel: 01293 514488 FAX: 01293 536852

approved (e.g., S2LG).

U-bolts for mounting on a 2-inch pipe (e.g., 2LGP).

P (suffix) indicates unit comes equipped with base plate and