

Trac-40



MODEL Trac-40

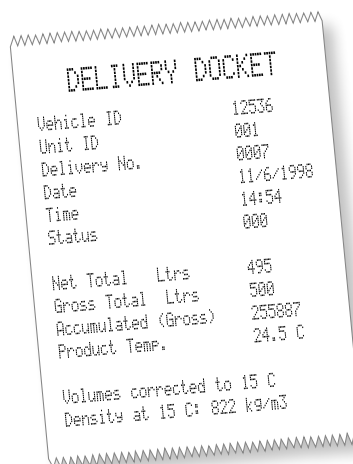
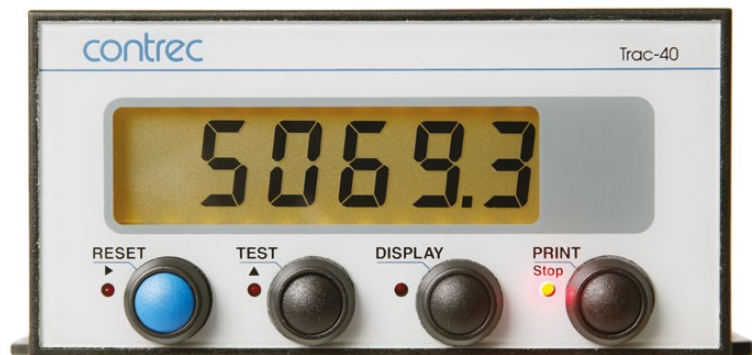
FEATURES

- Rugged
- Temperature Compensation
- Complies with International Metrology Standards
- Prints Delivery Tickets
- Nema 4X or IP65 Enclosure

APPLICATIONS

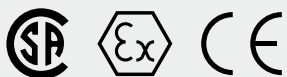
- Petroleum Tankers with Metered Deliveries
- LPG Trucks
- Aircraft Refuelling
- Anhydrous Ammonia
- Chemical Trucks
- Heating Oil Trucks

Electronic Truck Register



In truck applications where electronic registers must be able to operate in adverse conditions, the Trac-40 offers an economical solution for flow measurement and control.

Designed to operate with turbine, positive displacement or coriolis flowmeters, the Trac-40 meets the requirements for custody transfer of liquids throughout the world.



Electronic Truck Register



SPECIFICALLY DESIGNED FOR TRUCK INSTALLATIONS, THE TRAC-40 IS A REGISTER THAT WILL SURVIVE IN THE TOUGHEST OF ENVIRONMENTS FOR ELECTRONICS.

Preset or Start/Stop Mode

The Trac can be programmed to operate as either a Preset system where the required quantity is entered prior to a delivery, or as a Start/Stop system where an unspecified quantity can be delivered. Both modes have relay outputs which can be used to control pumps and valves.

Custody Transfer Approval

The Trac includes a dual pulse integrity check of the input signal and temperature compensation to API Tables as required for custody transfer. Temperature compensation is selectable to include compensation for general petroleum, LPG or other products. If temperature compensation is not required it can be disabled.

Truck Interlocks

Because the Trac is designed for truck applications, special features, unique to truck applications, are incorporated into the system including:

- A low frequency input cut-off which will ignore spurious flowmeter pulses which may be caused by pipe vibration as the vehicle travels between deliveries
- A transaction timeout which is incorporated into the software to prevent a partial delivery at one location and then a continued delivery at a second location without resetting the register (termed "riding the ticket")
- Delivery totals continue to be displayed even if power is disconnected
- A printer integrity test which will signal an error message if there is a printer problem
- 12 Volt DC and 24 Volt DC operation

Communications

The Trac-40 can operate in one of the following modes:

1. Printer only

Interfaces to an industry standard slip printer or standard line printers.

2. On-board computer

With an on-board computer, transaction results can be uploaded to the computer at the end of the delivery.

Construction

Based on Contrec's 400 Series instruments, the Trac-40 includes:

- Rugged fascia and switches
- Robust connectors
- Backlit display
- Mounting feet
- Conformal coated electronic assemblies similar to those used by the military

SPECIFICATIONS

Physical

Displays

Batch Total: 6 digit (11.8mm high) backlit LCD with automatic ranging

Keypad Buttons

Switches: Four heavy duty switches

Weights & Measures Seal: A program access switch, located behind a screw on the rear fascia, can be affixed with a lead seal to prevent tampering

Standard Enclosure

Dimensions: 144mm (5.7") wide x 72mm (2.8") high x 190mm (7.5") deep. The connector backshells will extend the depth to 235mm (9.3")

Material: Anodised aluminium

Sealing: IP65 (Nema 4X) weatherproof

Weight: 1.5 kg (approx)

Cable Connection: Four "D" style connectors

Explosion-proof Enclosure

Dimensions: 285mm (11.2") wide x 287mm (11.3") high x 231mm (9.1") deep

Approvals: CSA and ATEX

Operational

Power Requirements: 12 to 28Vdc, 3 watt maximum

Operating Temperature: -10 to +60°C

Communications: Dual RS232 shared port

Interference: CE compliant

Inputs and Outputs

Flow Inputs

Input Frequency: 0 to 10kHz with single pulse input. 0 to 2kHz with dual (quadrature) input. Note: Dual pulse is for pulse verification only and does not detect reverse flow

Pulse Integrity (Dual pulse only) If a pulse failure is detected the system will alarm and stop flow on that channel. Note: This is in accordance with API Standards, Chapter 5, Section 5; AS2702 - 1984; and ISO6551 - 1982

K-factor: **Linear** Single point 0.001 to 50000.0
Non Linear 10 points 0.001 to 50000.0

Temperature Inputs

Input Signal: RTD (4 wire)

Range:

LPG -45 to +60°C (-49 to +140°F)

Petroleum -100 to +200°C (-148 to +392°F)

General Liquids -273 to +200°C (-459 to +392°F)

Anhydrous Ammonia 0 to 40°C (32 to 104°F)

Input Circuit: 12 bit A/D converter

Correction: To API Table 24B/54B for gasoline, diesel, jet fuel; Table 34/54 for LPG; and Table 24A/54A for crude oil. Also correction for anhydrous ammonia is available.

Valve Control Outputs (Dual stage on/off)

Max Contact Voltage: 30Vdc or 30Vac

Max Current: 3A

Pulse Output (Scaled pulse output)

Pulse Width: 10 mSec

Maximum Frequency: 49 Hz



Important: Specifications are subject to change without notice.



Contrec Manufacturing (UK) Ltd

Riverside, Canal Road
Sowerby Bridge
West Yorkshire HX6 2AY

t +44 (0)1422 829944

f +44 (0)1422 829945

e admin@contrec.co.uk

w www.contrec.co.uk

SALES & TECHNICAL SUPPORT:

+44 (0)1422 829944

www.contrec.co.uk

Contrec Manufacturing Ltd

Manufacturing and Asia Sales:
+44 (0)1422 829944
admin@contrec.co.uk

Contrec Europe Ltd

European, Middle East and Africa
Sales: +44 (0)1422 829940
sales@contrec.co.uk

Contrec - USA

Americas & Canada Sales:
+1 (0)205 685 3000
customerservice@contrec-usa.com

Contrec Systems PTY Ltd

Australasia Sales and South East Asia
Support: +61 (0)413 505 114
paul@contrec.com.au