

# FLOW RATE INDICATOR / TOTALISER

6-digit Rate Indicator, 8-digit Totaliser

IP65, Gas groups I, IIA & IIB

- 6 digit flow rate indicator, 8 digit flow totaliser
- User selectable inputs : 0~20 mA, 4~20 mA, 0~5 volts, 1~5 volts, 0~10 volts
- Two batch relays, two flow alarm relays
- Programmable flow rate, setpoints and relay modes, etc.
- Application : Monitoring and controlling continuous as well as batch flow processes
- Isolated programmable 4~20 mA retransmission output
- RS485 / MODBUS
- Password protected programming and reset
- Programmable start, stop, reset functions



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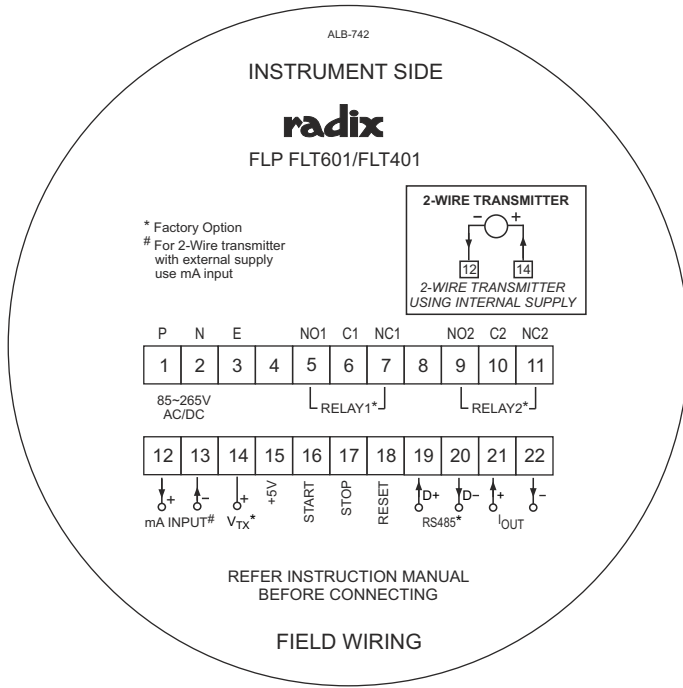
## SPECIFICATIONS

All specifications at ambient of 25 °C, unless specified otherwise

<p><b>INPUT</b></p> <p>Input</p> <p>Transmitter supply</p> <p>Accuracy</p> <p>Flow rate range</p> <p>Flow totaliser range</p> <p>Memory</p>	<p>0~20 mA, 4~20 mA, 0~5 volts, 1~5 volts, 0~10 volts 22 V nominal, 30 mA max 0.1% of span typical, 0.2% of span maximum</p> <p>0.00001 to 999999 EU 0 to 99999999</p> <p>Non volatile, indefinite retention</p>	<p><b>ENCLOSURE</b></p> <p>Enclosure</p> <p>Material</p> <p>Dimensions (in mm)</p> <p>Protection</p> <p>Pushbuttons</p> <p>Mounting</p> <p>Cable entries*</p> <p>* Cable glands to be ordered separately</p>	<p>Certified flameproof for gas groups I, IIA &amp; IIB</p> <p>Aluminium alloy</p> <p>352(H) x 190(W) x 170(D)</p> <p>IP65</p> <p>4, for programming &amp; viewing</p> <p>Wall mount</p> <p>5 x 3/4" ET</p>
<p><b>INDICATION</b></p> <p>Flow rate</p> <p>Totaliser</p> <p>Status indication</p>	<p>Upper : 6 digit, 7 segment 0.56" (14.2 mm) red LED display</p> <p>Lower : 8 digit, 7 segment 0.3" (7.62 mm) green LED display</p> <p>LEDs for relay status LEDs for flow rate unit LEDs for communication</p>	<p><b>PROGRAMMABLE PARAMETERS</b></p> <p>Input type</p> <p>Input mode</p> <p>Setpoints</p> <p>Resolution</p> <p>High scale for flow rate</p> <p>Low scale for flow rate</p> <p>Digital filter</p> <p>Time base unit</p> <p>Hysteresis for flow rate alarms</p> <p>Flow rate alarm logic</p> <p>Flow rate alarm type</p> <p>Alarm acknowledge</p> <p>Offset</p> <p>Relay logic for totaliser</p> <p>Auto reset time</p> <p>Setpoint lock</p> <p>Program lock</p> <p>Relay action</p> <p>Conversion factor</p> <p>Start, stop and reset functions</p>	<p>User selectable (DIP also to be set)</p> <p>Linear, Square root</p> <p>Flow rate : 0 to 999999</p> <p>Totaliser : 0 to 99999999</p> <p>Flow rate : 0.00001 to 1</p> <p>Totaliser : 0.0000001 to 1</p> <p>0.1 to 999999</p> <p>0 to 999999</p> <p>Low, Mid, High</p> <p>Second, minute, hour, day</p> <p>0.001 to 9999</p> <p>Full scale high, Full scale low, band in, band out</p> <p>Self reset or latched, enabled/disabled at power on</p> <p>Front panel function used to reset relay in alarm condition</p> <p>0 to 9999</p> <p>Latched mode, Autoreset mode</p> <p>0.1 to 99.9 seconds</p> <p>On, Off</p> <p>On, Off</p> <p>Reverse/Direct</p> <p>0.01 to 9999.99</p> <p>Programmable</p>
<p><b>VIEW MODE</b></p> <p>Integrated totaliser</p> <p>Roll over count of Integrated totaliser</p> <p>Peak</p> <p>Valley</p>	<p>0 to 99999999</p> <p>10<sup>5</sup></p> <p>Maximum flowrate after power on / reset</p> <p>Minimum flowrate after power on / reset</p>		
<p><b>OUTPUTS</b></p> <p>No. of relays</p> <p>Relay contact type</p> <p>Relay contact rating</p> <p>No. of analog outputs</p> <p>Current output</p> <p>Maximum load for current output</p> <p>Voltage output</p> <p>Load for voltage output</p> <p>Mutual isolation between input/output/supply</p>	<p>0/2/4 relays for either flow rate or totaliser</p> <p>NO-C-NC</p> <p>5A / 230V AC, resistive</p> <p>0 / 1 (current or voltage)</p> <p>4~20 mA / 0~20 mA / 20~4 mA / 20~0 mA isolated from input</p> <p>500 ohms</p> <p>0~10 V or user specified</p> <p>&gt;10 Kohms</p> <p>1KV AC RMS/1 minute, 250 V AC RMS continuous</p>		
<p><b>COMMUNICATION</b></p> <p>Port</p> <p>Protocol</p> <p>Slave ID</p>	<p>RS485</p> <p>Modbus RTU</p> <p>User programmable (1~256)</p>	<p><b>OTHER</b></p> <p>Supply voltage</p> <p>Power consumption</p> <p>Operating ambient temperature</p> <p>Relative humidity</p>	<p>a) 85~265 V AC, 50/60 Hz</p> <p>b) 20~35 V DC</p> <p>4 watts maximum</p> <p>0~50 °C</p> <p>Below 90%, non condensing</p>

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## CONNECTION DIAGRAM



## ORDERING INFORMATION

FLP FLT601 will be supplied with the following standard specifications :

Input type	4~20 mA
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ORDER CODE	
2418	A

A	Output Configuration			
	Relay for flow rate	Relay for totaliser	4~20 mA output	RS485
00	0	0	0	0
01	0	2	0	0
02	2	2	0	0
03	2	2	1	0
04	2	2	0	1
05	2	2	1	1

### Ordering Options

The following ordering options are available on request. Minimum order quantity and/or minimum order value may apply.

	Option	Details
1.	Analog output	0~10 V DC
2.	Supply voltage	24 V DC

CAT#556R0/310316/A

### ENQUIRIES

**Instruments:** sales@radix.co.in  
**Sensors:** sensors@radix.co.in  
**Gauges:** gauges@radix.co.in  
**Automation:** automation@radix.co.in  
**Level:** level@radix.co.in

RADIX ELECTROSYSTEMS PVT LTD  
 EL-135/136/137, Electronics Zone  
 TTC Indl. Area, MIDC, Mahape  
 Navi Mumbai - 400 710, India  
 + 91 22 42537707 • sales@radix.co.in

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 www.radix.co.in