

Highly accurate field instrumentation for the process industry.

The 100 Series is a range of economical, yet highly accurate, process instruments for use in field applications where a robust, weatherproof IP67 unit will provide the best solution.

All models feature simple programming, large display and input linearisation for increased accuracy.

Contrec is proud to be the benchmark for process and petroleum instrumentation.

The company was formed over 30 years ago to develop the first electronic flowmeter displays, and today Contrec instruments are installed in thousands of applications, in every continent and in most countries around the world. We are fully certified to ISO 9001:2008 and our equipment carries the latest approvals. We continually develop and test our products to comply with international standards on accuracy and also to the changing demands and requirements of our customers. We have assembled a professionally managed team with over 50 years experience in applying flow solutions, who are focused on satisfying our customers needs and expectations.

Instruments can be used for the following functions:



FLOW

MODELS 102A / 102D / 103D / 104D

A range of accurate Rate Totalisers designed to operate with virtually any pulse/frequency generating flow meters. Models feature high/low alarms and can be powered externally or locally. Rate and totals can be displayed in different engineering units. Model 102A accepts an analogue input.



BATCH

MODEL 114D

Accurate and reliable, this controller is designed for flow applications where precise control of batch quantities is required. The controller will accept pulse or frequency flow signals and provides one or two stage valve control. Controller requires a DC power supply.



LEVEL

MODEL 120A

An accurate level instrument which accepts signals from a wide range of sensors, transmitters and probes, and displays a large level bar graph and tank contents. Solid state relay outputs provide up to four level alarms and requires a loop power supply.



PROCESS

MODEL 150A

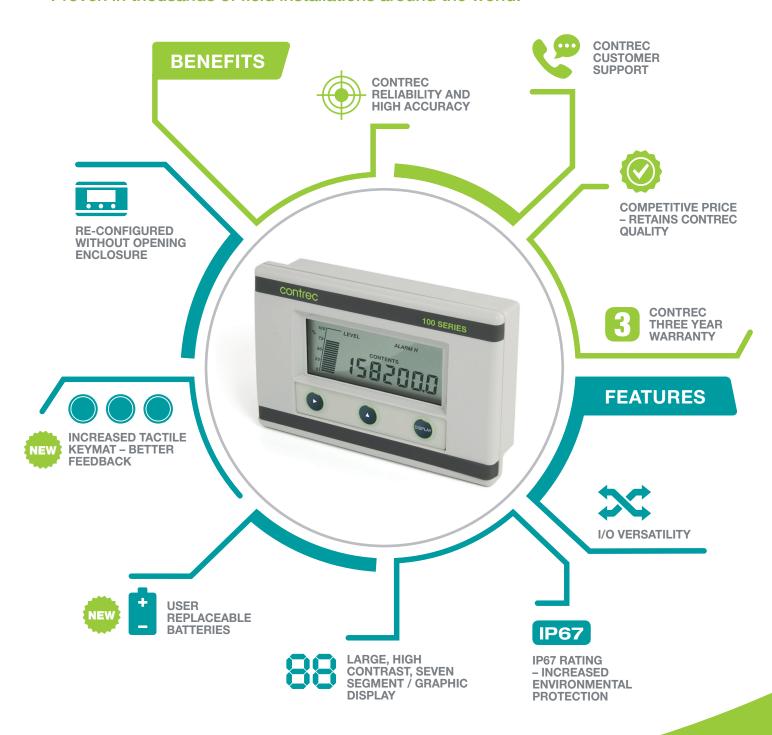
This versatile instrument accepts signals from a wide range of transducers and transmitters, and displays a large bar graph with a scaled process variable. Solid state relay outputs provide up to four level alarms and requires a loop power supply.

Please refer to specifications table on the back page. Data sheets are available from our website.



We are Contrec.World leaders in flow instrumentation.

Proven in thousands of field installations around the world.



Technical Specification & Order Codes

	102A	102D	103D	104D	114D	120A	150A
Application			П			l .	
Analogue to Frequency	1						
Frequency to Analogue				1			
Flow	1	1	1	1			1
Batching					/		
Level						1	1
Process							1
Input							
Analogue	1					1	1
Frequency		√	1	✓	√		
Features							
Linearisation	1	1	1	1		1	1
Bargraph						1	1
Totalisation	1	1	1	1	1		
Outputs							
Analogue (2 wire)				1			
Alarm/Relay	1 or 2*		1 or 2*	1 or 2*	2	4	4
Pulse/Frequency	1*		1*	1*			
Power Supply							
Loop powered	1			1		1	1
DC powered			1		1		
Battery (back-up**)		1	**	**	**		
Specifications							
Uncertainty (% of span)	0.05%					0.05%	0.05%
Update time	0.5 secs					0.5 secs	0.5 secs
Voltage drop (max)	2.5V					2.5V	2.5V
IP67/Nema 4X	1	1	1	1	1	1	1

*Choose between second alarm or pulse output

General Specifications

Operating

Temperature Limits: $-20 \text{ to } +60^{\circ}\text{C},$ $-4 \text{ to } +140^{\circ}\text{F}$

Enclosure

Overall Size: 98mm (3.9") height x 152mm (6.0") width x 43mm (1.7mm) depth

Protection: IP67 (Nema 4X) watertight

Cable Entry: By cable gland **Materials:** Polycarbonate and ABS

Display

Batch Total: 7 digit 10mm (0.4") high LCD

(continuously powered)

Preset: 5 digit 8.5mm (0.33") high LCD

(continuously powered)

K-factor Range: The pulses per unit of measure (eg. pulses/ gallon) is programmable in the range of 0.0001 to 999,999

Battery Backup

Type: 2 x Lithium battery packs

Function: The batteries will provide backup power for the instrument if no DC or loop power is available. The batteries will not power the sensor (if power is required) or solenoid outputs

Mounting Options

Wall: Unit supplied with universal mounting bracket as standard

Panel: Unit supplied with panel mounting brackets

Pipe: A galvanised metal bracket enables the unit to be attached to a 51mm (2") vertical or horizontal pipe

Instruments within the Contrec family:

100 Series

Accurate process instruments for field mounting applications

200 Series

Intrinsically safe, precise and reliable process instruments

400 Series

Rugged and dependable batch and flow control solutions

505 Series

Next generation flow instruments for a variety of applications

515 Series

Precise flow and batch control for more complex applications

1000 Series

Robust load computers for petroleum and chemical applications

TRAC 40

Vehicle mount custody transfer approved registers







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