Take your *temperature measurement* *to the next level*

PERFORMANCE MADE SMARTER

Introducing PR 5437

First of the next generation of temperature transmitters, HART 7 capability together with IEC 61508-2010 full assessment up to SIL 3, the PR 5437 offers unrivalled performance for the most demanding of applications.

TEMPERATURE | I.S. INTERFACES | COMMUNICATION INTERFACES | MULTIFUNCTIONAL | ISOLATION | DISPLAY

The PR 5437 is designed to meet the challenges and increased expectations of modern process control. Groundbreaking features and specifications mean you can now experience performance made smarter.

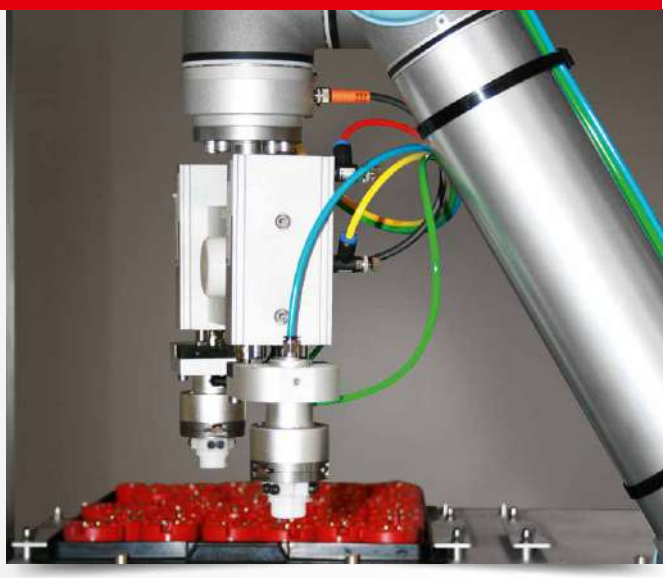
PR electronics

Global install base
+5 million temperature transmitters

For over 40 years, PR electronics has driven innovation in temperature signal conditioning. By introducing numerous patented technologies, we are enabling our customers to realize long-term efficiencies and reliability.

Our uncompromising approach to quality and product performance – even in the most demanding of environments – has made PR electronics the manufacturer of choice for many of the world's biggest companies, and has reinforced our position as a world leader in temperature transmitter manufacturing.

Designed for modern and automated high capacity in-house manufacturing to fully support customer demands into the future



Pioneers in programmable temperature transmitter technology and performance

The PR 5437 is equipped with an extensive suite of approvals for hazardous area and marine applications worldwide.

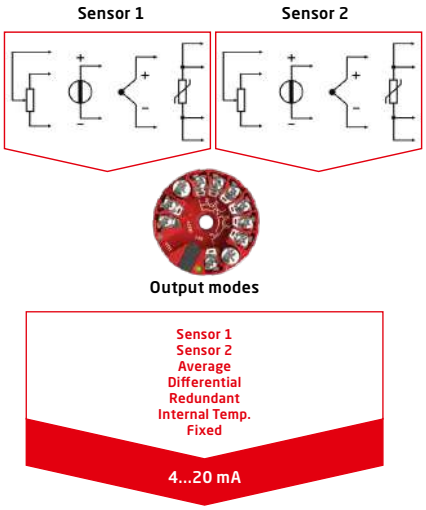
* EU RO member organizations: ABS, BV, CCS, CRS, DNV-GL, KR, LR, ClassNK, PRS, RINA and RS.

Highest performance
Zero compromise

With the PR 5437, it is now possible to obtain maximum accuracy measurements with the highest EMC immunity, across the widest range of process and ambient temperatures. With PR electronics' excellent reputation backed up by an extensive suite of functional safety, hazardous area and marine approvals, the PR 5437 delivers benefits across the full range of non-hazardous and intrinsically safe process applications worldwide.

True dual sensor input

Flexible dual input capability, with choice of output modes.



SIL 2 / SIL 3

Designed to meet functional safety requirements of safety instrumented systems up to SIL 3.

- Full Functional Safety Assessment to SIL 2 acc. IEC 61508-2010.
- Firmware assessed to SIL 3.
- SIL 3 capable in 1oo2 configuration using two PR devices.
- Enhanced EMC FS testing according to IEC 61236-3-1.

SIL 2 SIL 3

Superior specifications

- Ambient temperature range -50°C to +85°C (SIL: -40°C to +80°C)
- Temperature coefficient < 0.005% / °C
- Long term stability < 0.18% / 5 years
- Accuracy < 0.05°C*
- EMC - immunity influence < ±0.1% of span

* for all Pt100 spans

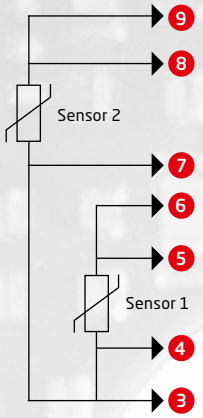
Performance *made smarter*

Dual sensor input options

Unrivalled dual input versatility means the PR 5437 can be used in the widest range of applications. High-density 7-terminal design allows up to 2x4-wire RTD input for high accuracy processes.

Extensive input combinations are possible to meet the most demanding of applications.

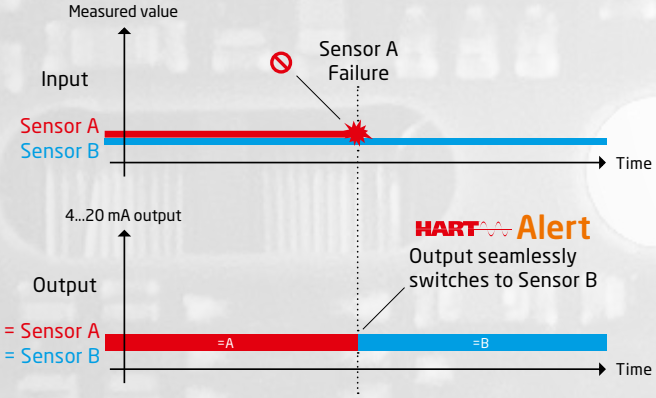
Dual Sensor Configurations		
Sensor 1		**Sensor 2**
RTD 2, 3, 4 W		RTD 2, 3, 4 W
TC	(int. CJC)	TC
TC	(ext. CJC 2, 3, 4 W)	TC
TC	(int. CJC)	RTD 2, 3, 4 W
TC	(ext. CJC 2, 3 W)	RTD 2, 3, 4 W
Potentiometer 3, 4, 5 W		Potentiometer 3, 4 W
Voltage		Voltage



2 x 4-wire RTD input

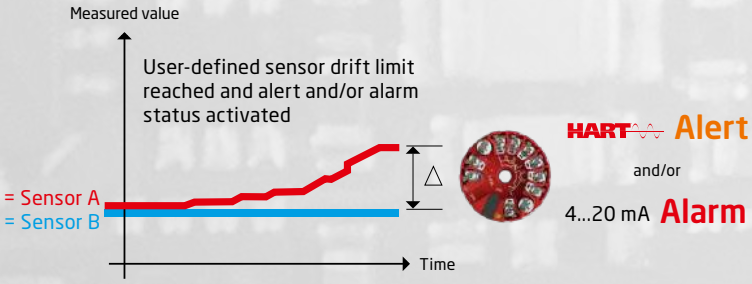
Sensor redundancy

Sensor redundancy maintains process availability and safety by seamlessly switching to backup sensor in the event of primary sensor failure. An alert via HART can be used to allow scheduling of maintenance on the faulty sensor.



Sensor drift detection

Sensor drift detection helps maintain measuring point reliability. By alerting when a sensor drifts beyond a user-configured level, scheduled maintenance can be accurately defined, or process given immediate attention.

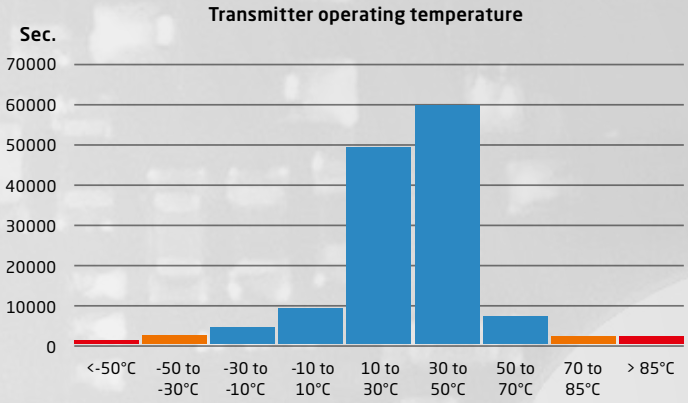


Improved process optimization and reporting capability

Operating data is available to logging and asset management systems, including min. / .max tracking and runtime metering.

Runtime metering of each separate sensor input as well as internal transmitter temperatures allow fine-tuning of process and statistical traceability.

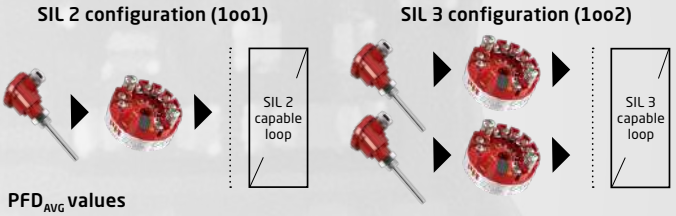
User-defined metering and sensor limit ranges improve diagnostics and allow tighter control and logging of process variances and out of range / limit events, resulting in increased quality and yields.



Example logging of internal transmitter temperatures

SIL certification

Full third party functional safety assessment to SIL 2 / SIL 3.
According to IEC 61508-2010 including firmware assessment to SIL 3 incl. SIL enable/disable function to suit individual applications.



PFD_{AVG} values

Mission time:	10 years	15 years
Resulting PFD_{AVG}:	1.15E-3	1.72E-3

PFD values support a proof test interval >= transmitter working life.

Improved diagnostics

The PR 5437 fully supports NAMUR NE107. NE107 is a recommendation from the NAMUR organization for "Self-monitoring and diagnosis of field devices" detailing how to make use of diagnostics in intelligent devices.

Defined status bits are used to convey diagnostic information from the device which is used by EDDL* based intelligent device management (IDM) software to assign and generate device diagnostic alarm filtering and dashboard displays etc.

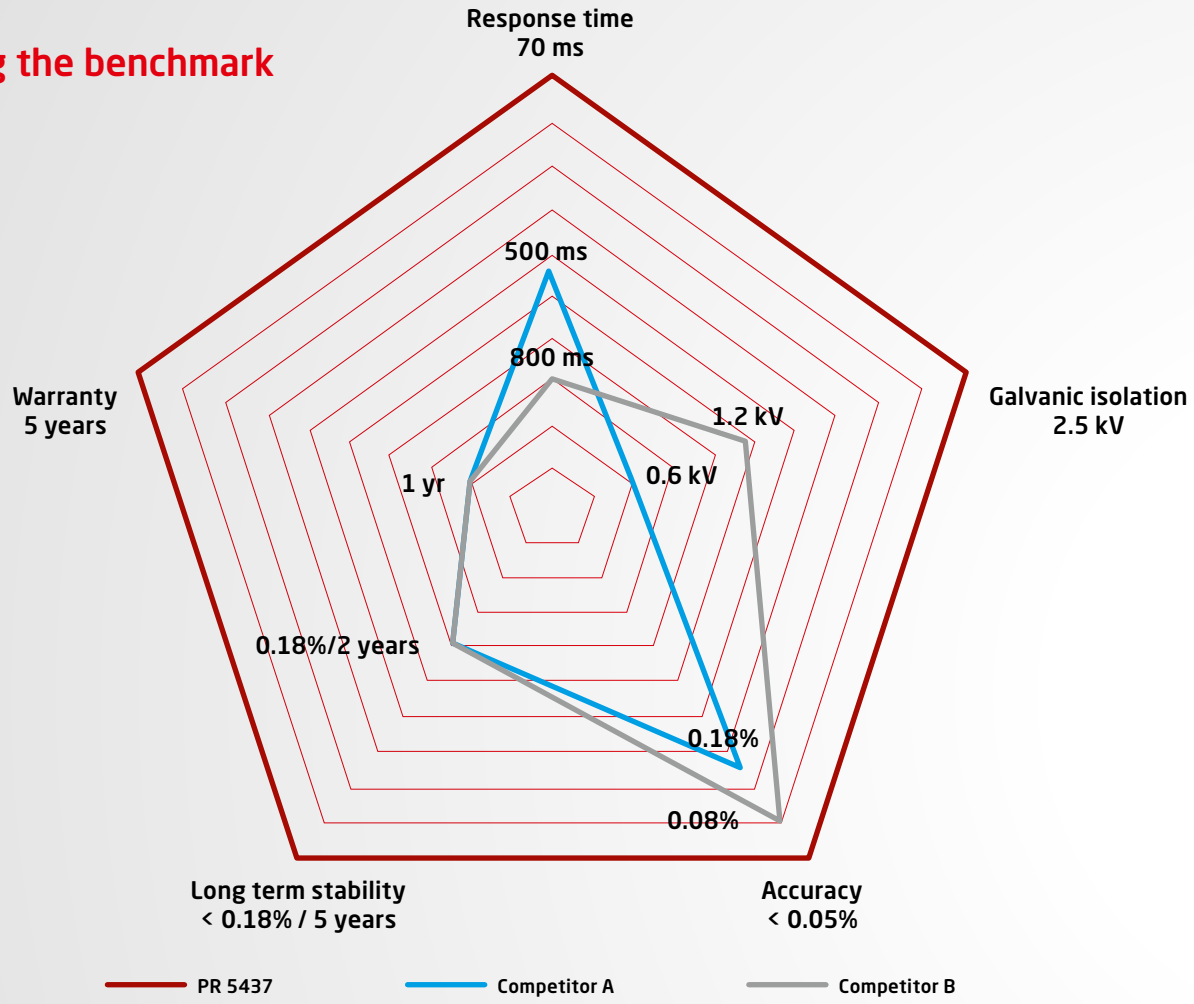
All diagnostics are assigned a category as below:

Status signal	Category	Typical description
X	Failed	Malfunction in the device or sensor - e.g. sensor / CJC error
?	Out of specification	Ambient or process conditions are out of range or below minimum requirement - e.g. internal temperature alarm
	Maintenance required	Advisory - e.g. sensor drift detected
	Check function	Signal temporarily suspended - e.g. incorrect configuration

*EDDL - Electronic device description language

Performance across *every specification*

Setting the benchmark



Accuracy: < 0.05°C*
Superior accuracy ensures true, reliable measurements.

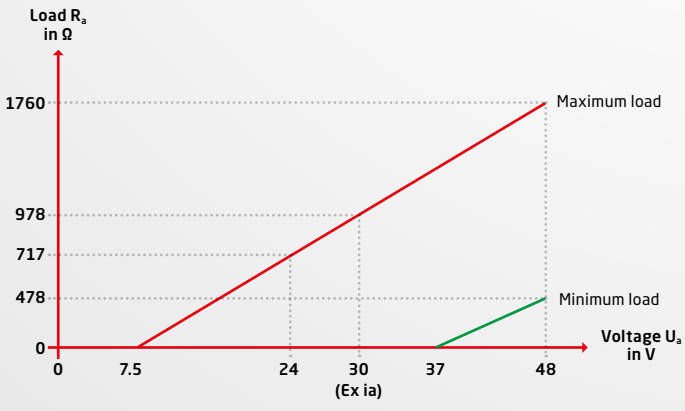
Response time: 70 ms
Fastest response time easily supports safety and cost-critical applications where fast reaction to temperature changes is vital.

Temperature coefficient: From < 0.005% / °C
Very low temperature coefficient ensuring maximum accuracy across changing ambient conditions.

Long term stability: < 0.18% / 5 years
Assured stable repeatability over installation lifetime.

High isolation: 2.5 kVAC / 55 VAC (42 VAC for I.S. versions)
Higher galvanic isolation provides maximum protection from ground loops, high voltage transients and common mode interference.

Power supply: 7.5 V...48 VDC (30 V for I.S. versions)
Extended loop supply range, giving higher loop loading capability.



* for all Pt100 spans

Raising *the bar*

PATENTED

Since 1974, we have been setting the benchmark, developing new and better standards within signal conditioning - and with the PR 5437, we have done it again.

Patent for: Simultaneous error detection
A patented technique of continuous out-of-frequency sensor measurement has been developed to allow the most rapid response to sensor error/wire breakage while simultaneously enabling extremely fast signal measurement. Full compatibility with digital process simulators is also ensured.

Patent (pending) for: Power supply
A patented power supply design has been developed which allows for full concurrent support of 3 high accuracy sensors (dual sensors and CJC) ensuring stability and accuracy of measurements.

NAMUR *standards*

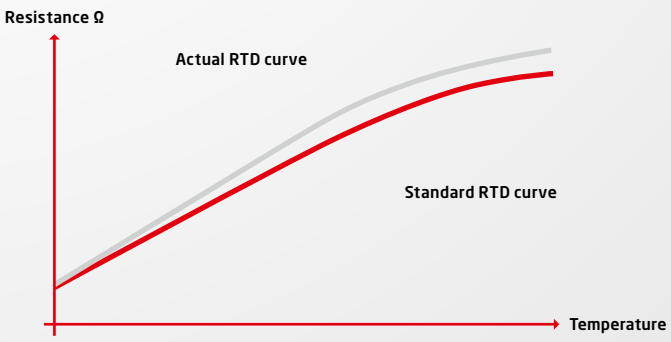
NAMUR NE21, IEC EN 61326-3-1
Extended EMC immunity testing by accredited laboratory according to NAMUR NE21, Criterion A, Burst. Meets IEC EN 61326-3-1 requirements ensuring stable functional safety performance in high EMC-prone installations.

NAMUR NE44
NAMUR compliant fault indication.

NAMUR NE43 & NE89
NAMUR compliant signaling, cable-break detection and device status reporting.

NAMUR NE107
NAMUR compliant diagnostic capability, for improved plant optimization and availability.

Sensor matching: Sensor-defined, CvD or custom
Widest range of standardized RTD inputs (e.g. IEC 60751, JIS C 1604-81, GOST) are accepted. For improved sensor matching a number of linearization options are possible including Callendar Van Dusen (CvD).



Callendar Van Dusen constants are specific to a certain RTD and are used to modify the standard RTD curve to more accurately reflect the actual curve of the device. This eliminates measurement errors and increases accuracy across the span.

HART 7 (HART 5)
The 5437 offers fully featured HART 7 capability with an option to select HART 5 mode for backward compatibility.

Signal dynamics
High resolution signal dynamics for maximum accuracy signal conversions.

Input: 24 bit
Output: 18 bit

Designed for the demands *of any installation*

Wiring
Innovative housing design means the PR 5437 can be wired from either the inside or the outside of the terminals.

1/4" center hole
Larger diameter center hole for easier installation over a wide range of probe mounting diameters.

Loop test pins
Introduction of accessible test pins allow measurement of loop current directly while maintaining loop integrity.

Status LED

Onboard LED indicates faults according to NAMUR NE44 and NE107.

Constant green	OK
Flashing red	Sensor / config error
Constant red	System error

Write protect & transmitter safe state

Jumpers allow selection of write protection and transmitter safe state options.

PR 5437
Write protect

PR 5437
Safe state

Universal inputs

The PR 5437 supports the widest range of standardized input types and custom linearizations. Supported standards include IEC 60751, JIS C 1604-81 and GOST.

RTD 2-, 3- & 4-wire	Pt10...10000
	Ni10...10000
	Cu5...1000
Thermocouple	B, E, J, K, L, N, R, S, T, U, W3, W5, LR
Voltage	± 800 mV, -0.1 V...+1.7 V
Linear resistance	0 Ω...100 kΩ
Potentiometer 3-, 4- & 5-wire	10 Ω...100 kΩ

Easy configuration *of your devices*

A wide range of configuration methods are available including full support for both EDD and FDT / DTM technology for use with DCS / Asset Management Systems and supported management packages e.g. Pactware. Configuration can also be by handheld terminal or by PC via a Loop Link interface or HART modem.

PC with PR Loop Link

PC with HART modem

HART COMMUNICATION PROTOCOL

DCS with DTM/EDD/DD

PR 5909 Loop Link is a dedicated communications interface for configuration and monitoring of PR electronics' PC-programmable devices using PReset software.

Private label *opportunity*

For relevant customers wishing to add additional value and product excellence to their portfolios, PR electronics offers the opportunity to have our products private labelled. This allows customers to benefit from PR electronics technical performance, while maintaining their own company identity on the products.

Various options exist such as the simple private label choices below:

Simple Private Label w/ approvals	Buyer's logo and product reference on product. Sellers name, address and approvals on product.
Simple Private Label wo/ approvals	Buyer's logo, product reference, name and address on product – no approvals supplied.

If this is of interest, please contact your local PR electronics sales office for more information.

PR 5437 Dual input, HART 7 / HART 5

PR 6437 Dual input, HART 7 / HART 5

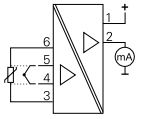
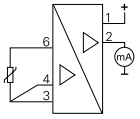
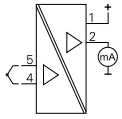
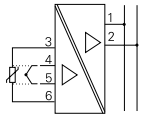
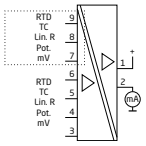
Order form

Type	Version		Inputs		SIL approval		Marine approval	
5437	General purpose	: A	Single input (4 terminals)	: 1	SIL	: S	Yes	: M
	Hazardous area	: D	Dual input (7 terminals)	: 2	No SIL	: -	No	: -
6437	General purpose	: A	Single input (4 terminals)	: 1	SIL	: S	Yes	: M
	Hazardous area	: D	Dual input (8 terminals)	: 2	No SIL	: -	No	: -

NEW

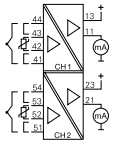


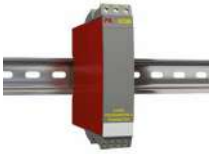


Type:	5331A 2-wire programmable transmitter	5333A 2-wire programmable transmitter	5334A 2-wire programmable transmitter	5350A Profibus PA / Foundation Fieldbus transmitter	5437A 2-wire HART 7 temperature transmitter
					
Input:					
mA, measurement range / min. span					
mV, measurement range / min. span	-12...+800 mV / 5 mV		-12...150 mV / 5 mV	-800...+800 mV / -	± 800 mV, -0.1 V...+1.7 V / 2.5 mV
RTD, measurement range / min. span	-200...+850°C / 25°C	-200...+850°C / 25°C		-200...+850°C / -	-200...+850°C / 10°C
Lin. R, measurement range / min. span	0...5000 Ω / 30 Ω	0...10 kΩ / 30 Ω		0...10 kΩ / -	0...100 kΩ / 25 Ω
Potentiometer				0...100 kΩ / -	10...100 kΩ / 10%
Sensor connection, wires	2 - 3 - 4	2 - 3		2 - 3 - 4	2 - 3 - 4
TC types	BEJKLNRSTUW3W5Lr		BEJKLNRSTUW3W5Lr	BEJKLNRSTUW3W5	BEJKLNRSTUW3W5Lr
Max. offset	50% of selec. max. value	50% of selec. max. value	50% of selec. max. value		
Cold junction compensation	Internal / external		Internal	Internal / external	Internal / external
Output:					
mA, signal range / min. span	3.5...23 mA / 16 mA	3.5...23 mA / 16 mA	3.5...23 mA / 16 mA	Profibus PA/Foundation F.	3.5...23 mA / 16 mA
Technical specifications:					
Ambient temperature	-40°C...+85°C	-40°C...+85°C	-40°C...+85°C	-40°C...+85°C	-50°C...+85°C
Supply voltage, DC	7.2...35 VDC	8...35 VDC	7.2...35 VDC	9...32 VDC	7.5...48 VDC
Max. required power	0.8 W	0.8 W	0.8 W	< 350 mW	< 850 mW
Isolation voltage, test / operation	1500 VAC / 50 V		1500 VAC / 50 V	1500 VAC / 50 V	2.5 kVAC / 55 VAC
Response time	1...60 s	0.33...60 s	1...60 s	1...60 s	70 ms
Signal dynamics, input / output	20 bit / 16 bit	19 bit / 16 bit	18 bit / 16 bit	24 bit / -	24 bit / 18 bit
Accuracy	≤ ±0.05% of span	≤ ±0.1% of span	≤ ±0.05% of span	≤ ±0.05% of MV	≤ ±0.05% of span
Temperature coefficient	< ±0.01% of span / °C	< ±0.01% of span / °C	< ±0.01% of span / °C	< ±0.002% of MV / °C	< ±0.005% of span / °C
NAMUR	NE21, NE43	NE43	NE21, NE43	NE21, NE43	NE21, NE43, NE44, NE89, NE 95, NE 107
Channels	1	1	1	1	1 / 1 or 2
Programming	5909	5909	5909	Profibus PA/Foundation F.	5909 / HART 7 / HART 5
Approvals:					
ATEX, Zone 2	✓	✓	✓	✓	✓
IECEx, Zone 2	✓	✓	✓		✓
FM, Zone 2 - DIV 2				✓	✓
CSA, Zone 2 - DIV 2				✓	✓
CCOE	✓	✓	✓		
INMETRO	✓	✓	✓		✓
DNV-GL	✓	✓	✓		
EU-RO marine					✓
EAC	✓	✓	✓	✓	✓
NEPSI				✓	✓
SIL 2/3 Full assessment					✓
SIL 2 Hardware assessment					
Application guide:					
RTD / TC / mV input	✓ / ✓ / ✓	✓ / - / -	- / ✓ / ✓	✓ / ✓ / ✓	✓ / ✓ / ✓
Lin. R / potentiometer input	✓ / -	✓ / -		✓ / ✓	✓ / ✓
Dual input				4 terminals	
True dual input					7 terminals
Custom sensor linearisation	✓	✓	✓	✓	✓
mA output	✓	✓	✓		✓
Bus-powered PA / FF				✓	
Loop-powered	✓	✓	✓		✓
Galvanically isolated	✓		✓	✓	✓
HART protocol					✓
Process signal calibration	✓	✓	✓	✓	✓

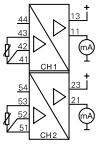
Of span = Of the presently selected range **Of MV** = Of the present measurement value **LOI** = Local Operator Interface

6331A
2-wire programmable transmitter

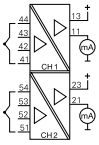




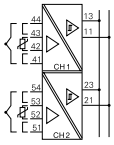
6333A
2-wire programmable transmitter



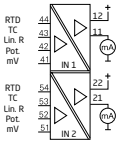
6334A
2-wire programmable transmitter



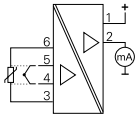
6350A
Profibus PA / Foundation Fieldbus transmitter



6437A
2-wire HART temperature transmitter

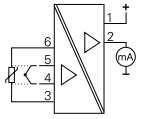
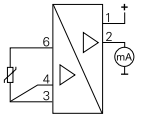
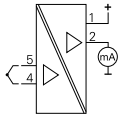
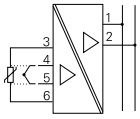
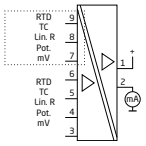


7501
Field mounted HART temperature transmitter



			-100...+100 mA / -		
-12...+800 mV / 5 mV		-12...+150 mV / 5 mV	-800...+800 mV / -	± 800 mV, -0.1 V...+1.7 V / 2.5 mV	-800...+800 mV / 2.5 mV
-200...+850°C / 25°C	-200...+850°C / 25°C		-200...+850°C / -	-200...+850°C / 10°C	-200...+850°C / 10°C
0...5000 Ω / 30 Ω	0...10 kΩ / 30 Ω		0...10 kΩ / -	0...100 kΩ / 25 Ω	0...7000 Ω / 25 Ω
			0...100 kΩ / -	10...100 kΩ / 10%	
2 - 3 - 4	2 - 3		2 - 3 - 4	2 - 3 - 4	2 - 3 - 4
BEJKLNRSTUW3W5Lr		BEJKLNRSTUW3W5Lr	BEJKLNRSTUW3W5	BEJKLNRSTUW3W5Lr	BEJKLNRSTUW3W5
50% of selec. max. value	50% of selec. max. value	50% of selec. max. value			50% of selec. max. value
Internal / external		Internal	Internal / external	Internal / external	Internal / external
3.5...23 mA / 16 mA	3.5...23 mA / 16 mA	3.5...23 mA / 16 mA	Profibus PA/Foundation F.	3.5...23 mA / 16 mA	3.5...23 mA / 16 mA
-40°C...+85°C	-40°C...+85°C	-40°C...+85°C	-40°C...+85°C	-50°C...+85°C	-40°C...+85°C
7.2...35 VDC	8...35 VDC	7.2...35 VDC	9...32 VDC	7.5...48 VDC	10 / 12...35 VDC
1-ch.: 0.8 W 2-ch.: 1.6 W	1-ch.: 0.8 W 2-ch.: 1.6 W	1-ch.: 0.8 W 2-ch.: 1.6 W	< 350 mW per channel	< 850 mW	
1500 VAC / 50 V		1500 VAC / 50 V	1500 VAC / 50 V	2.5 kVAC / 55 VAC	1500 VAC / 50 V
1...60 s	0.33...60 s	1...60 s	1...60 s	70 ms	1...60 s
20 bit / 16 bit	19 bit / 16 bit	18 bit / 16 bit	24 bit / -	24 bit / 18 bit	22 bit / 16 bit
≤ ±0.05% of span	≤ ±0.1% of span	≤ ±0.05% of span	≤ ±0.05% of MV	≤ ±0.05% of span	≤ ±0.05% of span
< ±0.01% of span / °C	< ±0.01% of span / °C	< ±0.01% of span / °C	< ±0.002% of MV / °C	< ±0.005% of span / °C	< ±0.005% of span / °C
NE21, NE43	NE43	NE21, NE43	NE21, NE43	NE21, NE43, NE44, NE89, NE 107	NE21, NE43
1 or 2	1 or 2	1 or 2	1 or 2	1 / 1 or 2	1
5909	5909	5909	Profibus PA/Foundation F.	5909 / HART 7 / HART 5	LOI / HART
✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓
			✓	✓	
			✓	✓	
				✓	✓
				✓	✓
✓	✓	✓	✓	✓	
				✓	✓
				✓	
					✓
✓ / ✓ / ✓	✓ / - / -	- / ✓ / ✓	✓ / ✓ / ✓	✓ / ✓ / ✓	✓ / ✓ / ✓
✓ / -	✓ / -		✓ / ✓	✓ / ✓	✓ / -
			4 terminals		4 terminals
				8 terminals	
✓	✓	✓	✓	✓	✓
✓	✓	✓		✓	✓
			✓		
✓	✓	✓		✓	✓
✓		✓	✓	✓	✓
				✓	✓
✓	✓	✓	✓	✓	✓

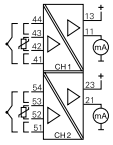
NEW

Type:	5331D 2-wire programmable transmitter	5333D 2-wire programmable transmitter	5334B 2-wire programmable transmitter	5350B Profibus PA / Foundation Fieldbus transmitter	5437D 2-wire HART 7 temperature transmitter
					
Input:					
mA, measurement range / min. span					
mV, measurement range / min. span	-12...+800 mV / 5 mV		-12...150 mV / 5 mV	-800...+800 mV / -	± 800 mV, -0.1 V...+1.7 V / 2.5 mV
RTD, measurement range / min. span	-200...+850°C / 25°C	-200...+850°C / 25°C		-200...+850°C / -	-200...+850°C / 10°C
Lin. R, measurement range / min. span	0...5000 Ω / 30 Ω	0...10 kΩ / 30 Ω		0...10 kΩ / -	0...100 kΩ / 25 Ω
Potentiometer				0...100 kΩ / -	10...100 kΩ / 10%
Sensor connection, wires	2 - 3 - 4	2 - 3		2 - 3 - 4	2 - 3 - 4
TC types	BEJKLNRSTUW3W5Lr		BEJKLNRSTUW3W5Lr	BEJKLNRSTUW3W5	BEJKLNRSTUW3W5Lr
Max. offset	50% of selec. max. value	50% of selec. max. value	50% of selec. max. value		
Cold junction compensation	Internal / external		Internal	Internal / external	Internal / external
Output:					
mA, signal range / min. span	3.5...23 mA / 16 mA	3.5...23 mA / 16 mA	3.5...23 mA / 16 mA	Profibus PA/Foundation F.	3.5...23 mA / 16 mA
Technical specifications:					
Ambient temperature	-40°C...+85°C	-40°C...+85°C	-40°C...+85°C	-40...+85°C	-50°C...+85°C
Supply voltage, DC	7.2...30 VDC	8...30 VDC	7.2...30 VDC	9...30 VDC	7.5...30 VDC
Max. required power	0.7 W	0.7 W	0.7 W	< 350 mW	< 850 mW
Isolation voltage, test / operation	1500 VAC / 50 V		1500 VAC / 50 V	1500 VAC / 50 V	2.5 kVAC / 42 VAC
Response time	1...60 s	0.33...60 s	1...60 s	1...60 s	70 ms
Signal dynamics, input / output	20 bit / 16 bit	19 bit / 16 bit	18 bit / 16 bit	24 bit / -	24 bit / 18 bit
Accuracy	≤ ±0.05% of span	≤ ±0.1% of span	≤ ±0.05% of span	≤ ±0.05% of MV	≤ ±0.05% of span
Temperature coefficient	< ±0.01% of span / °C	< ±0.01% of span / °C	< ±0.01% of span / °C	< ±0.002% of MV / °C	< ±0.005% of span / °C
NAMUR	NE21, NE43	NE43	NE21, NE43	NE21, NE43	NE21, NE43, NE44, NE89, NE 95, NE 107
Channels	1	1	1	1	1 / 1 or 2
Programming	5909	5909	5909	Profibus PA/Foundation F.	5909 / HART 7 / HART 5
Approvals:					
ATEX	✓	✓	✓	✓	✓
IECEx	✓	✓	✓	✓	✓
FM	✓	✓		✓	✓
CSA	✓	✓		✓	✓
CCOE	✓	✓			
INMETRO	✓	✓	✓	✓	✓
DNV-GL	✓	✓	✓		
EU-RO marine					✓
EAC Ex	✓	✓	✓	✓	✓
NEPSI				✓	✓
SIL 2/3 Full assessment					✓
SIL 2 Hardware assessment					
Application guide:					
RTD / TC / mV input	✓ / ✓ / ✓	✓ / - / -	- / ✓ / ✓	✓ / ✓ / ✓	✓ / ✓ / ✓
Lin. R / potentiometer input	✓ / -	✓ / -		✓ / ✓	✓ / ✓
Dual sensor				4 terminals	
True dual input					7 terminals
Custom sensor linearisation	✓	✓	✓	✓	✓
mA output	✓	✓	✓		✓
Bus-powered PA / FF				✓ / ✓	
Loop-powered	✓	✓	✓		✓
Galvanically isolated	✓		✓	✓	✓
HART protocol					✓
Process signal calibration	✓	✓	✓	✓	✓

Of span = Of the presently selected range **Of MV** = Of the present measurement value **LOI** = Local Operator Interface

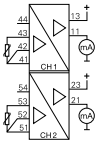
6331D

2-wire programmable transmitter



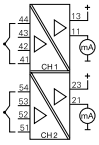
6333D

2-wire programmable transmitter



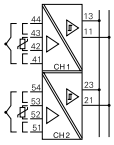
6334B

2-wire programmable transmitter



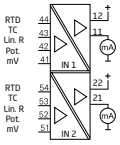
6350B

Profibus PA / Foundation Fieldbus transmitter



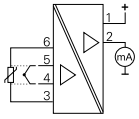
6437D

2-wire HART temperature transmitter



7501

Field mounted HART temperature transmitter



			-100...+100 mA / -		
-12...+800 mV / 5 mV		-12...+150 mV / 5 mV	-800...+800 mV / -	± 800 mV, -0.1 V...+1.7 V / 2.5 mV	-800...+800 mV / 2.5 mV
-200...+850°C / 25°C	-200...+850°C / 25°C		-200...+850°C / -	-200...+850°C / 10°C	-200...+850°C / 10°C
0...5000 Ω / 30 Ω	0...10 kΩ / 30 Ω		0...10 kΩ / -	0...100 kΩ / 25 Ω	0...7000 Ω / 25 Ω
			0...100 kΩ / -	10...100 kΩ / 10%	
2 - 3 - 4	2 - 3		2 - 3 - 4	2 - 3 - 4	2 - 3 - 4
BEJKLNRSTUW3W5Lr		BEJKLNRSTUW3W5Lr	BEJKLNRSTUW3W5	BEJKLNRSTUW3W5Lr	BEJKLNRSTUW3W5
50% of selec. max. value	50% of selec. max. value	50% of selec. max. value			50% of selec. max. value
Internal / external		Internal	Internal / external	Internal / external	Internal / external
3.5...23 mA / 16 mA	3.5...23 mA / 16 mA	3.5...23 mA / 16 mA	Profibus PA/Foundation F.	3.5...23 mA / 16 mA	3.5...23 mA / 16 mA
-40°C...+85°C	-40°C...+85°C	-40°C...+85°C	-40°C...+85°C	-50°C...+85°C	-40°C...+85°C
7.2...30 VDC	8...30 VDC	7.2...30 VDC	9...32 VDC	7.5...30 VDC	10 / 12...30 VDC
1-ch.: 0.7 W 2-ch.: 1.4 W	1-ch.: 0.7 W 2-ch.: 1.4 W	1-ch.: 0.7 W 2-ch.: 1.4 W	< 350 mW per channel	< 850 mW	
1500 VAC / 50 V		1500 VAC / 50 V	1500 VAC / 50 V	2.5 kVAC / 42 VAC	1500 VAC / 50 V
1...60 s	0.33...60 s	1...60 s	1...60 s	70 ms	1...60 s
20 bit / 16 bit	19 bit / 16 bit	18 bit / 16 bit	24 bit / -	24 bit / 18 bit	22 bit / 16 bit
≤ ±0.05% of span	≤ ±0.1% of span	≤ ±0.05% of span	≤ ±0.05% of MV	≤ ±0.05% of span	≤ ±0.05% of span
< ±0.01% of span / °C	< ±0.01% of span / °C	< ±0.01% of span / °C	< ±0.002% of MV / °C	< ±0.005% of span / °C	< ±0.005% of span / °C
NE21, NE43	NE43	NE21, NE43	NE21, NE43	NE21, NE43, NE44, NE89, NE 107	NE21, NE43
1 or 2	1 or 2	1 or 2	1 or 2	1 / 1 or 2	1
5909	5909	5909	Profibus PA/Foundation F.	5909 / HART 7 / HART 5	LOI / HART
✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓
✓	✓		✓	✓	✓
✓	✓		✓	✓	✓
				✓	✓
				✓	✓
✓	✓	✓	✓	✓	✓
				✓	✓
				✓	
					✓
✓ / ✓ / ✓	✓ / - / -	- / ✓ / ✓	✓ / ✓ / ✓	✓ / ✓ / ✓	✓ / ✓ / ✓
✓ / -	✓ / -		✓ / ✓	✓ / ✓	✓ / -
			4 terminals		4 terminals
				8 terminals	
✓	✓	✓	✓	✓	✓
✓	✓	✓		✓	✓
			✓		
✓	✓	✓		✓	✓
✓		✓	✓	✓	✓
				✓	✓
✓	✓	✓	✓	✓	✓

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