





TRANSMITTER COMPARISON

	JMS	EMERSON ROSEMOUNT	
			
	8PA & 8PS	644	3144P
Dimensions	Ø 110mm	Ø 90,9mm	Ø 112mm
Dimensions (W x H x D)	110 X 145 X 125,5 mm	108 X 102,2 X 102,6 mm	112 X 112 X 132 mm
Dot matrix display 64 X 96 pixels	Yes	No (14 digit, 2 line)	No (5 digit LCD display)
Scrolling text message / advanced diagnostic	Yes	No	Yes
HART revision	5 & 7	5	7
Temperature range / silicone O-ring	-40...+85°C	-40...+85°C (Buna-N O-ring)	
Protection degree	IP54 / IP66 / 68	IP66 /IP68/NEMA Type 4X	
HART 5 polling address	Up to 15 transmitters	Up to 15 transmitters	
HART 7 polling address	Up to 63 transmitters	Up to 63 transmitters	
Display Diameter	60 mm diameter		
0, 90, 180 & 270 degree position adjustment	✓ Yes	No	
Radial bar graph	✓ Yes	Yes	
"Trend" arrow indicates	✓ Yes	No	
Selectable white/red backlight.	✓ Yes	No	
Optical pushbuttons, Guided menu structure	✓ Yes	No	
INPUT			
RTD	Pt50, Pt100, Pt200, Pt500, Pt1000	Pt50, Pt100, Pt200, Pt500, Pt1000	
Ni	Ni50, Ni100, Ni120, Ni1000	Ni120	
TC	B, E, J, K, N, R, S, T, U, W3, W5	✓ B, E, J, K, L, N, R, S, T, U, W5, L(Gost)	
LinR	0...5 kOhm	0....2 kOhm	
mV	-800...800 mV	-10....100 mV	
Special RTD / TC custom curve	✓ Yes	No	
Accuracy	✓ ± <0,05 % of selected range	± <0,1 % of selected range ± <0,05 % of selected range (enhanced), ± <0,1 % of selected range	
Output:	4...20mA	4...20mA	
NE 43 (sensor error / out of range)	Yes	Yes	
Response Time	✓ 440 ms	500 ms	
Damping	1s...60s programmable	1s... 60 s programmable	
Configuration	✓ LOI Software and HART modem	Depending on display type (No /Yes) No, No No	
Ex ia IS	10 (12 with backlight)....30 VDC	12....42,4 VDC	
Other	10 (12 with backlight)..... 35VDC		
ISOLATION			
Input to output (test/operation)	1.5 kV AC / 50 VAC	600V RMS / ? / 707 V peak / ?	
EN 61326-1	<+/- 0,1 % of span	Yes, %?	
Namur NE21 A criteria burst	<+/- 1 % of span	Yes, %?	
Warranty	✓ 5 years	3/5 years	
APPROVALS			
ATEX, IECEx, FM, CSA	Yes	By option only, Yes	
EAC TR-CU 020/2011	EN 61326-1	By option only, Yes	
EAC Ex TR-CU 012/2011 , INMETRO, NEPSI, DNV Marine, GL	Yes	By option only, Yes	
SIL	FMEDA report	By option only, IEC 61508 certified	

All Transmitter Options Compared Available Directly From JMS!!