PRODUCT SPECIFICATIONS

Thermo Scientific AutoXP

Single run flow computer and smart multivariable transmitter

The Thermo Scientific[™] AutoXP instrument is built on the fieldproven AutoCONFIG platform. Designed for harsher environments across all oil and gas sectors.

Features

- Custody transfer compliant
- Bluetooth connectivity
- Through glass keypad interface
- Designed to meet Class 1 Div I requirements

The Thermo Scientific AutoXP has been designed to provide ultimate flexibility to our customers by providing a unit that can be used as a single-run flow computer or smart multi-variable transmitter. In addition this unit can be configured for both gas and liquid applications utilizing todays most common primary devices all while meeting Class 1 Div I requirements.



AutoCONFIG Configuration Software

Thermo Scientifiic flow computers are built on an innovative field proven platform incorporating the latest measurement standards and calculations for hydrocarbon measurement. AutoCONFIG interface allows for simplified configuration eliminating need for indepth programming. Control functions include Station Control, PID, Alarming, Event based logging and many more.

Thermo SCIENTIFIC - AutoCONFIG			ALC: NOT THE OWNER OF THE OWNER OWNE	100 CT 100 CT	
System Eiles Tools Options Col		elp			
#1 F F 🖻 🧕 🏼	🥑 🛞 🕒 🏷 🤣	in (* <mark>8</mark>			Advanced Mode
	p Flow Calculation - DP Flow Calc#1				4 ▶ x
Physical Data Point(s) ¥	Auto Refresh F2 Refresh	F3 Apply F4 Calibrate	F1 Help		<u>^</u>
Calculation(s) *	,	, , ,	, ,	,	
- 32-Calculation Thread Allocation	Static Instant	neous Eng. Unit	Min/Max History E	nergy/Fwv/Well Stream	Location Factor
⊕- 33-PID					
B- 34-Proportional Output	Zb Factor	0	Gas Temperature	0 'F	
⊕ 35-High/Low Selection ⇒ 38-Differential Pressure Flow	ZiFactor	0	Differential Pressure		
DP Flow Calc#1	Zs Factor	0		0 inH20	
- DP Flow Calc#2	Epy Factor	0	Static Pressure	0 PSI	
- DP Flow Calc#3	rpv racioi	0	Sqrt. Ext.	0	
DP Flow Calc#4					
⊕ 39-AGA 7 Flow ⊕ 40-AGA 10 Speed of Sound	Curr Hour Volume	0 MCF	Curr Month Volume	0 MCF	E
	Prev Hour Volume	0 MCF	Prev Month Volume	0 MCF	
⊕ 43-Historical Average	Curr Hour Energy	0 MMBTU	Curr Month Energy	0 MMBTU	
⊕ 46-Discrete Logical OR	Prev Hour Energy	0 MMBTU	Prev Month Energy	0 MMBTU	
#- 47-Discrete Logical AND					
⊕- 49-PLC Program ⊕- 54-Discrete Point NOT	Flow Status	Not Flowing	Current Day Flow Time	0 Hour	
⇔ 54-Discrete Point NU1 ⇒ 57-Station Control	Flow Time This Period	0 Hour	Previous Day Flow Time		
⊕ 60-Sampler Accumulator	Hourly Flow Rate	0 MCF/Hour		0 Hour	
⊕ 65-Plunger Lift	Daily Flow Rate	0 MCF/Day	Hourly Energy Rate	0 MMBTU/Hour	
⊕- 66-CallOut	Totalized Volume	0 MCF	Daily Energy Rate	0 MMBTU/Day	
⊕ 68-Math	Current Day Volume	0 MCF	Totalized Energy	0 MMBTU	
⊞- 128-Gas Quality Data		0 MCF	Current Day Energy	0 MMBTU	
Communication(s) ¥	Previous Day Volume	0 MCF	Previous Day Energy	0 MMBTU	
Interface					
Miscellaneous ¥	AGA2530 Beta	0	AGA2530 Fsl	0	
User Configurable ¥	AGA2530 Ftf	0	AGA2530 Fc	0	-
			Access Level: Superuser	Off Line SID =	N/A TX:27 RX:27 ERR:0

Thermo Scientific[™] AutoCONFIG built-in software





Thermo Scientific[™] AutoXP

thermo scientific

Thermo Scientific[™] AutoXP

General specifications

Processor	32-bit		
Program memory	4 MB of flash memory		
Data storage memory	SRAM, 2 MB, battery-backed		
CPU board communication port	1 RS232, 1 RS232/1 RS485, 1 10Base-T Ethernet port		
Input power	10 VDC to 30 VDC		
Historical data storage	User configurable, defaulting to 65 days of daily, 35 days of hourly per meter run		
Audit trails	User configurable, defaulting to 200 audit events		
Alarm log storage	User configurable, defaulting to 200 alarm events		
Environmental specificat	ions		
Operating temperature	-40°C to +85°C (-40°F to +185°F)		
Operating humidity	0-95% RH, non-condensing		
Enclosure rating	NEMA 4X/IP67		
Certifications	CSA/C-US Class I, Div 1, Groups B, C, D; ambient temperature range of -40°C to +85°C (-40°F to +185°F),		
	temperature code T6 (-40°C to 75°C) T5 (-40°C to 85°C)		
	EN 61326-1: 2013 (Industrial Criteria): FCC 47 CFR Part 15, Subpart B: ICES 003: 2016		

Input/Display specifications			
Keypad Display	4 IR through glass key input 128x65 backlit LCD display; User programmable scroll list and menus		
Natural gas calculations			
Supercompressibility Differential meters Linear meters Energy Diagnostic Additional factors/equations Turbine meter linearization	(Fpv) AGA 8 Gross-1992; AGA 8 Detail-1992; AGA 8 Short-1988; NX-19; NX-19 Analysis; GERG (DP, Orifice) AGA 3/ANSI/API 2530-1992 Method 2; AGA 3/ANSI/API 2530-1985; ISO 5167; Cone meters; Annubar; GOST (Turbine) AGA 7; AGA 9; AGA 11 AGA 5; GPA 2172; ISO 6976 AGA 10 SoS Fwv (manual, partial or full); Fws; Nist 14 10 Point Frequency/K-factor Table		
Liquid calculations			
API tables	Table A (generalized crude oils); Table B (generalized products); Table C (thermal expansion properties); Old Table (NGL, LPG SG range 0.425 to 0.650); Table 23/24 E (NGL, LPG); VCF (CH 11.1 2004); Propylene (CH 11.3.3.2); Ethylene (API 2565/CH 11.3.2.1); Ethylene (NBS 1045)		
Volume correction factor (VCF)	Consistent with API 2540/ASTM D1250-80/IP 200; 5/6 A/B; 23/24 A/B; 53/54 A/B; 6/24/54 C; CH 11.1 2004; Note: natural gas liquids (NGL) and liquefied petroleum gases (LPG): OLD 23/24, OLD 53/54; Table E is new standard to replace OLD 23/24.		
Correction for effect of pressure on liquid Propylene density Ethylene density Live density input	Ch 11.2.1/Ch 11.2.2; Ch 11.2.1M/Ch 11.2.2M (compressibility factors for hydrocarbons), equilibrium pressure API Ch 11.3.3.2 API 2565 (Ch 11.3.2.1); Ethylene NBS 1045 Thermo Scientific Sarasota liquid density meter, Solartron, UGC, 4-20 mA		

USA

27 Forge Parkway Franklin, MA 02038 Ph: (713) 272-0404 Fax: (713) 272-2273 orders.process.us@thermofisher. india@thermofisher.com com

India C/327, TTC Industrial Area MIDC Pawane New Mumbai 400 705, India Ph: +91 22 4157 8800

China +Units 702-715, 7th Floor Tower West, Yonghe Beijing, China 100007 Ph: +86 10 84193588 info.eid.china@thermofisher.com

Europe Ion Path, Road Three, Winsford, Cheshire CW73GA UK Ph: +44 1606 548700 Fax: +44 1606 548711 sales.epm.uk@thermofisher.com

Find out more at thermofisher.com/AutoXP



© 2018 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. EPM_AutoXP_DS_0218