

## PROMET EExd

A complete moisture measurement package for critical process gas applications.

<b>Product Parent Code: PT-MON</b>		
<b>Promet EExd - Main Unit</b>		
<b>Product Ordering Code {Feature A}+{Feature B}+{Feature C}+{Feature D}+{Feature M}</b>		
Feature	Item	Description
<b>Feature {A}</b>	<b>Base Model</b>	
	PT-MON	EExd ceramic metal oxide moisture analyser, range -120 to +30C DP, 1 ppbV to 30,000 ppmV. Mains power, capacitive touch screen, integrated pressure reading, flow alarms. Modbus RTU, Two 4-20mA outputs, Two volt free contacts per channel. Min. pressure 30barg, sample flow (0.2 m3/h 3.3 L/min) typical
<b>Feature {B}</b>	<b>Channel</b>	
	B3	Single moisture measurement channel operation (including flow alarm) 60 barg maximum
	B5	Single moisture measurement channel operation (including flow alarm) 138 barg maximum
	B6	Two moisture measurement channel operation (including flow alarm) 138 barg maximum
<b>Feature {C}</b>	<b>Hazardous Configurations</b>	
	C1	ATEX/IECEx certified system
	C2	North American certified
<b>Feature {D}</b>	<b>Channel</b>	
	D1	IGT Bulletin #8 natural gas moisture calculation
	D2	ISO18453 natural gas moisture calculation
<b>Feature {M}</b>	<b>Material Certification</b>	
	M0	No material certification
	* M1	Material certificate to BS EN 10204 – type 3.1
	* M2	Material certificate to BS EN 10204 – type 3.1 + NACE MR0175 Conformity
<b>* On certain labor intensive services, no discount can be offered. These items are always offered at list price.</b>		

<b>Product Parent Code: PT-SYS-I/PT-SYS-M</b>		
<b>Premium Sampling System</b>		
<b>Product Ordering Code {Feature A}+{Feature B}+{Feature C}+{Feature D}+{Feature E}+{Feature F}+{Feature G}+{Feature M}</b>		
Feature	Item	Description
<b>Feature {A}</b>	<b>Base Model</b>	
	PT-SYS-I	Sample system with Base Model Analyser - 1/4" tube with twin ferrule compression fittings. Pressure, flow control & filter options. Gas wetted parts in 316L SS with Viton soft parts. All gas and cable entries are located in the base of the enclosure. Bypass Flowrate (0.36 m3/h (6 L/min) nominal
	PT-SYS-M	Sample system with Base Model Analyser - 6mm tube with twin ferrule compression fittings. Pressure, flow control & filter options. Gas wetted parts in 316L SS with Viton soft parts. All gas and cable entries are located in the base of the enclosure. Bypass Flowrate (0.36 m3/h (6 L/min) nominal
<b>Feature {AB}</b>	<b>Analyzer</b>	
	AB9	Single moisture measurement channel operation IGT - ATEX/IECEx certified 60 barg maximum
	AB10	Single moisture measurement channel operation ISO - ATEX/IECEx certified 60 barg maximum
	AB13	Single moisture measurement channel operation IGT - ATEX/IECEx certified 138 barg maximum
	AB14	Single moisture measurement channel operation ISO - ATEX/IECEx certified 138 barg maximum
	AB15	Two moisture measurement channel operation IGT - ATEX/IECEx certified 138 barg maximum
	AB16	Two moisture measurement channel operation ISO - ATEX/IECEx certified 138 barg maximum
	AB17	Single moisture measurement channel operation IGT - North American certified 60 barg maximum
	AB18	Single moisture measurement channel operation ISO - North American certified 60 barg maximum
	AB21	Single moisture measurement channel operation IGT - North American certified 138 barg maximum
	AB22	Single moisture measurement channel operation ISO - North American certified 138 barg maximum
	AB23	Two moisture measurement channel operation IGT - North American certified 138 barg maximum
	AB24	Two moisture measurement channel operation ISO -North American certified 138 barg maximum
<b>Feature {B}</b>	<b>Hazardous Configurations</b>	
	B1	ATEX/IECEx certified
	B2	North American Certified (Class 1 Div 2) 110VAC
<b>Feature {C}</b>	<b>Channel</b>	
	C1	1000 psig/69 barg inlet pressure, 1 channel (Natural gas applications)
	C2	2000 psig/138 barg inlet pressure, 1 channel (Natural gas applications)
	C3	1000 psig/69 barg inlet pressure, 2 channel (Natural gas applications)
	C4	2000 psig/138 barg inlet pressure, 2 channel (Natural gas applications)
	C5	1000 psig/69 barg inlet pressure, 1 channel (Trace moisture applications)
	C6	2000 psig/138 barg inlet pressure, 1 channel (Trace moisture applications)
	C7	1000 psig/69 barg inlet pressure, 2 channel (Trace moisture applications)
	C8	2000 psig/138 barg inlet pressure, 2 channel (Trace moisture applications)

**Process Analyzers**

<b>Feature {D}</b>	<b>Enclosure</b>	
	D1	Standard indoor sampling system (316SS mounting plate) - 1 channel
	D2	Standard indoor sampling system (316SS mounting plate) - 2 channel
	D3	Standard outdoor sampling system (with 304 SS enclosure), IP66/NEMA 4 - 1 channel
	D4	Standard outdoor sampling system (with 304 SS enclosure), IP66/NEMA 4 - 2 channel
	D5	Standard outdoor sampling system (with 316 SS enclosure), IP66/NEMA 4 - 1 channel
	D6	Standard outdoor sampling system (with 316 SS enclosure), IP66/NEMA 4 - 2 channel
<b>Feature {E}</b>	<b>Heating (Outdoor systems only)</b>	
	E0	No Heater required
	E1	240VAC Fixed 20°C, 1 channel
	E2	110VAC Fixed 20°C, 1 channel
	E3	240VAC Adj 0-60°C (ATEX/IECEX), 1 channel
	E4	110VAC Adj 0-60°C (ATEX/IECEX), 1 channel
	E5	240VAC Fixed 40°C (not for use with F6), 1 channel
	E6	110VAC Fixed 40°C (not for use with F6), 1 channel
	E7	240VAC Fixed 20°C, 2 channel
	E8	110VAC Fixed 20°C, 2 channel
	E9	240VAC adjustable 0-60°C (ATEX/IECEX), 2 channel
	E10	110VAC adjustable 0-60°C (ATEX/IECEX), 2 channel
	E11	240VAC Fixed 40°C (not for use with F6), 2 channel
E12	110VAC Fixed 40°C (not for use with F6), 2 channel	
<b>Feature {F}</b>	<b>Enclosure Cooling</b>	
	F0	No cooling required
	F4	240VAC (ATEX/IECEX) Enclosure cooling required $\geq$ 45°C ambient (Adjustable setpoint, instrument air supply required)
	F5	110VAC (ATEX/IECEX) Enclosure cooling required $\geq$ 45°C ambient (Adjustable setpoint, instrument air supply required)
	F6	Enclosure cooling (mechanical control) for temperature 45°C max. ambient (instrument air supply required)
<b>Feature {G}</b>	<b>Heat Trace Line Channel 1</b>	
	G0	No heat trace option
	G1	240VAC 3m trace heated sample line assembly (6mm O.D. AISI 316)
	G2	240VAC 3m trace heated sample line assembly (1/4" O.D. AISI 316)
	G3	110VAC 3m trace heated sample line assembly (6mm O.D. AISI 316)
	G4	110VAC 3m trace heated sample line assembly (1/4" O.D. AISI 316)
	For systems needing > 3m trace heated sample line (max. 15m) - contact Michell Instruments	
<b>Feature {H}</b>	<b>Heat Trace Line Channel 2 (Only applicable to 2 channel version)</b>	
	H0	No heat trace option
	H1	240VAC 3m trace heated sample line assembly (6mm O.D. AISI 316)
	H2	240VAC 3m trace heated sample line assembly (1/4" O.D. AISI 316)
	H3	110VAC 3m trace heated sample line assembly (6mm O.D. AISI 316)
	H4	110VAC 3m trace heated sample line assembly (1/4" O.D. AISI 316)
	For systems needing > 3m trace heated sample line (max. 15m) - contact Michell Instruments	
<b>Feature {M}</b>	<b>Material Certification</b>	
	M0	No material certification
	* M1	Material certificate to BS EN 10204 – type 3.1
	* M2	Material certificate to BS EN 10204 – type 3.1 + NACE MR0175 Conformity
<p><b>NOTE: Due to the limited number of control station cable entries available; for two channel systems which require enclosure heating, vortex cooling and electrical heat trace lines, only Enclosure Cooling Option F6 (Mechanical Enclosure Cooling) can be offered.</b></p>		
<p><b>* On certain labor intensive services, no discount can be offered. These items are always offered at list price.</b></p>		

**Ordering Example**

<b>PT-MON+B3+C1+D2+M0</b>	<b>Promet EExd Analyzer, single moisture measurement channel operation (including flow alarm) 60 barg maximum, ATEX certified, ISO, no material certificates</b>
<b>PT-SYS-M +AB4+B1+C3+D6+E1+F0+ G1+H1+M0</b>	<b>Promet EExd Analyzer, metric tubing, two moisture measurement channel operation ISO, ATEX, 1000 PSI Natural Gas application, Outdoor 316SS enclosure, 20C Fixed heating, no cooling, 240VAC heat trace 3m Channel 1, 240VAC heat trace 3m Channel 2, no material certificates</b>

**PROMET EExd ACCESSORIES, SPARE PARTS, DOCUMENTATION & SERVICES**

Order Codes	Product / Description
<b>Spares &amp; Accessories</b>	
PT-HPR-240	Stand alone heated pressure reduction system 240VAC (300 barg/4350 psig inlet, max 507psig/35barg outlet) - ATEX only
PT-HPR-115	Stand alone heated pressure reduction system 115VAC (300 barg/4350 psig inlet, max 507psig/35barg outlet) - ATEX only
PT-SYS-SC	Michell standard mounting frame, floor standing with sun canopy and three sides- 316 box section construction with roof and side panels
PTS-WDC	Water dew-point sensor assembly (with pressure transmitter)
PTS-SX-WDC	As above but service calibration exchange replacement
<b>Documentation (Standard documentation package comprises User Manuals (one printed per analyzer system) plus CD ROM containing Ex certificates, Drawing Set, Calibration Certificates and Pressure test certificates)</b>	
* SP-MC	Material Certificates for spare parts
* PT-DOC	Documentation package (per individual system (to Michell Standard SDR list))
* PT-DOC-E	Electronic documentation package (per individual system (to Michell Standard SDR list))
* PT-DOC-ADH	Duplicate of DOC package (each hard copy)
* PT-DOC-ADS	Duplicate of DOC package (each soft copy (CDROM))
* PT-DOC-ADE	Duplicate of DOC-E package (on CDROM)
* PT-DOC-CVDR	Documentation package for customer specific VDR
* PT-DOC-CP	Document package on customer headed paper (per individual system (to Michell Standard SDR list))
* PT-DOC-CP-ADH	Duplicate of DOC package on customer headed paper (each hard copy)
* PT-DOC-CP-ADS	Duplicate of DOC package on customer headed paper (each soft copy (CDROM))
* PT-DRG	Drawings for approval before build
<b>Additional Services</b>	
* PT-COM	Commissioning & training on-site (as engineer rates price list)
** PT-FAT1	One day FAT pre-delivery inspection / or first day of inspection
** PT-FAT2	Each consecutive day of FAT pre-delivery inspection
** GEN-FAT-ST8	FAT 8 hour stability test
** GEN-FAT-ST12	FAT 12 hour stability test
** GEN-FAT-ST24	FAT 24 hour stability test
<b>Packaging</b>	
* PT-MON-PAC	Packing for Main Unit only (crate for air and road)
* PT-SYS-PAC1	Packing for Main Unit with 1 or 2 channel Sampling System (crate for air & road)
<b>Consumable items - C1 and C4 sampling systems only:</b>	
PT-SFK	Filter kit for Coalescer and Membrane Separator - each
PTS-GAC	Glycol adsorption cartridges - pack of 10
<b>Consumable items - C5 and C8 sampling systems only:</b>	
PTS-PFT	Particulate filter element - each
<b>* On certain labor intensive services, no discount can be offered. These items are always offered at list price.</b>	
<b>**These are the Michell charges for the FAT only. The cost of any third party inspector attending will be passed on, at cost, in addition to the Michell charges. Therefore, please ensure that the costs of any third party inspector(s) are added at the quotation stage.</b>	

Please note: Michell Instruments adopts a continuous development program which sometimes necessitates specification changes without notice. Please contact us for latest version. Issue No: Promet EExd\_97265\_V9\_UK\_0223