

PROMET EExd A complete moisture measurement package for critical process gas applications.		
Product Parent Code: PT-MON Promet EExd - Main Unit		
Base Model		
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	PT-MON	
Channel		
Single moisture measurement channel operation (including flow alarm) 60 barg maximum	A	
Single moisture measurement channel operation (including flow alarm) 138 barg maximum	B	
Two moisture measurement channel operation (including flow alarm) 138 barg maximum	C	
Hazardous Configurations		
ATEX/IECEX certified system	A	
North American certified	B	
Channel		
IGT Bulletin #8 natural gas moisture calculation	A	
ISO18453 natural gas moisture calculation	B	
NOTE: PT-MON-Mx (Material Certificates) should be added as an additional line item if required.		

Product Parent Code: PT-SYS-I/PT-SYS-M Premium Sampling System		
Base Model		
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-I	
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	PT-SYS-M	
Analyzer		
Single moisture measurement channel operation IGT - ATEX/IECEX certified 60 barg maximum	AB9	
Single moisture measurement channel operation ISO - ATEX/IECEX certified 60 barg maximum	AB10	
Single moisture measurement channel operation IGT - ATEX/IECEX certified 138 barg maximum	AB13	
Single moisture measurement channel operation ISO - ATEX/IECEX certified 138 barg maximum	AB14	
Two moisture measurement channel operation IGT - ATEX/IECEX certified 138 barg maximum	AB15	
Two moisture measurement channel operation ISO - ATEX/IECEX certified 138 barg maximum	AB16	
Single moisture measurement channel operation IGT - North American certified 60 barg maximum	AB17	
Single moisture measurement channel operation ISO - North American certified 60 barg maximum	AB18	
Single moisture measurement channel operation IGT - North American certified 138 barg maximum	AB21	
Single moisture measurement channel operation ISO - North American certified 138 barg maximum	AB22	
Two moisture measurement channel operation IGT - North American certified 138 barg maximum	AB23	
Two moisture measurement channel operation ISO -North American certified 138 barg maximum	AB24	
Hazardous Configurations		
ATEX/IECEX certified	B1	
North American Certified (Class 1 Div 2) 110VAC	B2	

Channel	
1000 psig/69 barg inlet pressure, 1 channel (Natural gas applications)	C1
2000 psig/138 barg inlet pressure, 1 channel (Natural gas applications)	C2
1000 psig/69 barg inlet pressure, 2 channel (Natural gas applications)	C3
2000 psig/138 barg inlet pressure, 2 channel (Natural gas applications)	C4
1000 psig/69 barg inlet pressure, 1 channel (Trace moisture applications)	C5
2000 psig/138 barg inlet pressure, 1 channel (Trace moisture applications)	C6
1000 psig/69 barg inlet pressure, 2 channel (Trace moisture applications)	C7
2000 psig/138 barg inlet pressure, 2 channel (Trace moisture applications)	C8
Enclosure	
Standard indoor sampling system (316SS mounting plate) - 1 channel	D1
Standard indoor sampling system (316SS mounting plate) - 2 channel	D2
Standard outdoor sampling system (with 316 SS enclosure), IP66/NEMA 4 - 1 channel	D5
Standard outdoor sampling system (with 316 SS enclosure), IP66/NEMA 4 - 2 channel	D6
Heating (Outdoor systems only)	
No Heater required	E0
240VAC Fixed 20°C, 1 channel	E1
110VAC Fixed 20°C, 1 channel	E2
240VAC Adj 0-60°C (ATEX/IECEX), 1 channel	E3
110VAC Adj 0-60°C (ATEX/IECEX), 1 channel	E4
240VAC Fixed 40°C (not for use with F6), 1 channel	E5
110VAC Fixed 40°C (not for use with F6), 1 channel	E6
240VAC Fixed 20°C, 2 channel	E7
110VAC Fixed 20°C, 2 channel	E8
240VAC adjustable 0-60°C (ATEX/IECEX), 2 channel	E9
110VAC adjustable 0-60°C (ATEX/IECEX), 2 channel	E10
240VAC Fixed 40°C (not for use with F6), 2 channel	E11
110VAC Fixed 40°C (not for use with F6), 2 channel	E12
Enclosure Cooling	
No cooling required	F0
240VAC (ATEX/IECEX) Enclosure cooling required $\geq 45^{\circ}\text{C}$ ambient (Adjustable setpoint, instrument air supply required)	F4
110VAC (ATEX/IECEX) Enclosure cooling required $\geq 45^{\circ}\text{C}$ ambient (Adjustable setpoint, instrument air supply required)	F5
Enclosure cooling (mechanical control) for temperature 45°C max. ambient (instrument air supply required)	F6
Heat Trace Line Channel 1	
No heat trace option	G0
240VAC 3m trace heated sample line assembly (6mm O.D. AISI 316)	G1
240VAC 3m trace heated sample line assembly (1/4" O.D. AISI 316)	G2
110VAC 3m trace heated sample line assembly (6mm O.D. AISI 316)	G3
110VAC 3m trace heated sample line assembly (1/4" O.D. AISI 316)	G4
For systems needing > 3m trace heated sample line (max. 15m) - contact Michell Instruments	

Heat Trace Line Channel 2 (Only applicable to 2 channel version)		
No heat trace option	H0	
240VAC 3m trace heated sample line assembly (6mm O.D. AISI 316)	H1	
240VAC 3m trace heated sample line assembly (1/4" O.D. AISI 316)	H2	
110VAC 3m trace heated sample line assembly (6mm O.D. AISI 316)	H3	
110VAC 3m trace heated sample line assembly (1/4" O.D. AISI 316)	H4	
For systems needing > 3m trace heated sample line (max. 15m) - contact Michell Instruments		
Material Certification		
No material certification	M0	
Material certificate to BS EN 10204 – type 3.1	* M1	
Material certificate to BS EN 10204 – type 3.1 + NACE MR0175 Conformity	* M2	
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.		
* On certain labor intensive services, no discount can be offered. These items are always offered at list price.		

Ordering Example	
PT-MON-AAB	Exd 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 Single moisture measurement channel operation (including flow alarm) 60 barg maximum ATEX/IECEX certified system ISO18453 natural gas moisture calculation
PT-SYS-M +AB10+B1+C3+D6+E1+F0+ G1+H1+M0	Promet EExd Analyzer, metric tubing, single moisture measurement channel operation ISO - ATEX/IECEX certified 60 barg maximum, 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

PROMET EEXD ACCESSORIES, SPARE PARTS, DOCUMENTATION & SERVICES	
Material Certification	
* PT-MON-M1	Material certificate to BS EN 10204 – type 3.1
* PT-MON-M2	Material certificate to BS EN 10204 – type 3.1 + NACE MR0175 Conformity
Spares & Accessories	
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 for 1 Channel system
PT-SYS-SC2	Michell standard mounting frame, floor standing with sun canopy and three sides-316 box section construction with roof and side panels for 2 Channel system
PTS-WDC	Water dew-point sensor assembly (with pressure transmitter)
PTS-SX-WDC	As above but service calibration exchange replacement

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)	
* SP-MC	Material Certificates for spare parts
* PT-DOC	Documentation package (per individual system (to Michell Standard SDR list))
* PT-DOC-E	Electronic Documentation Booklet - EDB (per individual system (to Michell Standard SDR list). Each section of the EDB will be bookmarked and compiled as a PDF file.
* PT-DOC-ADE	Duplicate of DOC-E package (on CDROM)
* PT-DOC-CVDR	Documentation package for customer specific VDR
* PT-DOC-CPE	Document package on customer headed paper (per individual system (to Michell Standard SDR list))
* PT-DOC-CP-ADE	Duplicate of DOC package on customer headed paper (each soft copy (CDROM))
* PT-DRG	Drawings for approval before build
Packaging	
* 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)
* PT-SYS-PAC2	Packing for Sampling System and frame/suncanopy (crate for air & road)
Consumable items - C1 and C4 sampling systems only:	
PT-SFK	Filter kit for Coalescer and Membrane Separator - price each
PTS-GAC	Glycol adsorption cartridges - pack of 10
Consumable items - C5 and C8 sampling systems only:	
PTS-PFT	Filter element, 3micron woven mesh - price each
Additional Services	
* 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	8 hour unwitnessed stability test
** GEN-FAT-ST24	24 hour unwitnessed stability test
* On certain labor intensive services, no discount can be offered. These items are always offered at list price.	
**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.	