# **QMA601**

Analyzer only (supplied with Desiccant Drier, Back Pressure Regulator & Gauge)

Product Parent Code: QMA601-MON QMA601 Analyzer		
<b>Product Orde</b>	ring Code {Feat	ure A}+{Feature B}+{Feature C}+{Feature D}+{Feature E}+{Feature M}
Feature	Item	Description
Feature {A}	Base Model	
	QMA601-MON	Exd certified, automatic online Quartz Crystal Microbalance moisture measurement in a wide range of gases.  Measurement range 1-2000ppmv, accuracy +/-0.1ppmv. Mains power, colour touch screen, RS485 Modbus RTU & TCP/IP, 2 x 4-20mA and 4 volt free contact outputs. NPL/NIST traceable moisture generator
Feature {B}	Hazardous Con	figurations
	B1	ATEX/IECEx certified system
	B2	cQPSus certified system (24VDC) Class I Division 1 / Class I Zone 1
Feature {C}	Moisture Generator	
	C1	Low Range (~0.5 ppmv)
	C2	Medium range (~5 ppmv)
	C3	High Range (~50 ppmv)
Feature {D}	Calibration	
	D4	Standard Calibration - 0.1 ppmv to 700ppmv (2 barg input, 1 barg back pressure)
	D5	Non Standard Calibration (Input pressure change)
	D6	Asymmetric Calibration (2 barg input, 1 barg back pressure) - always use Moisture Generator option C2 Medium range (~5 ppmv)
Feature {M}	Material Certific	cation
	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
* On certain	labor intensive s	services, no discount can be offered. These items are always offered at list price.

### **Ordering Example**

QMA601-MON +B1+C2+D4+M0	Base unit, ATEX/IECEc certified, Medium Range MG, Standard Calibration, No Material certification	
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## **QMA601-MON ACCESSORIES**

QMA601-MON-E1	Contamination trap (All other applications – natural gas, complex petrochemicals, reforming recycle, etc)
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## **QMA601**

**QMA601 EExd Sampling System for Natural Gas or Trace Moisture** 

<b>Q. 1.7 (0 0 1 1 1 2 7</b>	ta Jamping 57.	Stelli for Natural Gas of Trace Moisture	
Product Parent Code: QMA601-SYS-I/QMA601-SYS-M QMA601 Sampling System			
<b>Product Orde</b>	ring Code {Feat	ure A}+{Feature B}+{Feature C}+{Feature D}++{Feature G}+{Feature M}	
Feature	Item	Description	
Feature {A}	Base Model		
	QMA601-SYS-I	Sample system with Base Model Analyser specifically designed for the measurement of trace moisture levels. 1/4" tube w	
	QMA601-SYS-M	Sample system with Base Model Analyser specifically designed for the measurement of trace moisture levels. 6mm tube v	
Feature {B}	<b>Hazardous Conf</b>	igurations	
	B1	ATEX/IECEx certified system	
	B2	North American certified system Class 1 Div 2 (Analyzer 24VDC, sampling system 110VAC)	
Feature {C}	Sampling System Type		
	C1	Indoor Sampling System 316 stainless steel panel	
	C2	Outdoor Sampling System 304 stainless steel enclosure	
	C3	Outdoor Sampling System 316 stainless steel enclosure	
Feature {D}	Fast Loop Bypass		
	D0	No Fast Loop Bypass required (Particulate filter – For pure gas applications only)	
	D1	Fast Loop Bypass (Pressure Regulator, Flow Meter + Non Return Valve) plus membrane filter for Natural Gas application	
	D2	Fast Loop Bypass (Pressure Regulator, Flow Meter + Non Return Valve) with particulate/coalescing filter for Trace Moisture applications	
	D3	Fast Loop Bypass (Pressure Regulator, Flow Meter + Non Return Valve) with membrane filter and purge inlet with 3 way valve for H2 Recycling applications - MUST BE USED WITH QMA601-MON-BC2-D6-E1-M	

Feature {E}	Heating (Outdoor systems only)		
	E0	No Heater required	
	E1	240VAC Fixed 20°C	
	E2	110VAC Fixed 20°C	
	E3	240VAC adjustable 0-60°C (ATEX/IECEx)	
	E4	110VAC adjustable 0-60°C (ATEX/IECEx)	
	E5	240VAC Fixed 40°C (not for use with F7)	
	E6	110VAC Fixed 40°C (not for use with F7)	
Feature {F}	Outdoor San	npling System Cooling (non-mandatory)	
	F0	No cooling required	
	F4	240VAC (ATEX/IECEx) Enclosure cooling for temperature ≥ 35°C ambient (Adjustable setpoint, instrument air supply required)	
	F5	110VAC (ATEX/IECEx) Enclosure cooling for temperature ≥ 35°C ambient (Adjustable setpoint, instrument air supply required)	
	F6	Ventilated enclosure with louvre panels (IP55 only) Ambient temperature -20C to +35C	
	F7	Enclosure cooling (mechanical control) for temperature 45°C max. ambient (instrument air supply required)	
Feature {G}	Outdoor Sampling System Trace heating (non-mandatory)		
	G0	No Trace Heating	
	G1	240VAC 3m trace heated sample line assembly (1/8" O.D. AISI 316)	
	G2	110VAC 3m trace heated sample line assembly (1/8" O.D. AISI 316)	
	G3	240VAC 3m trace heated electro polished sample line assembly (1/8" O.D. AISI 316)	
	G4	110VAC 3m trace heated electro polished sample line assembly (1/8" O.D. AISI 316)	
		For longer heated sample line lengths - please contact Michell {max 15m}	
Feature {M}	Material Cert	tification	
	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	

### **Ordering Example**

QMA601- MON+B1+C2+D1+E0+M0	Base unit, ATEX/IECEc certified, Medium Range MG, Standard Calibration, No Material certification
QMA601-SYS-I +B1+C2+D1+E1+F0+G1+M 1	Sampling System with Imperial fittings, ATEX/IECEx certified, 304 enclosure, Fast Loop Bypass, 240VAC 20C heater, No Cooling, 240VAC 3m trace heating, Material certificate to BS EN 10204 – type 3.1
Total System	

OMAGO1 ACCESSORIES SPADE DADTS DOCUMENTATION & SERVICES

Order Codes	Product / Description
Spares & Accessories	
QMA601-SYS-MF	Michell standard mounting frame
QMA601-SYS-SC	Michell standard mounting frame, floor standing with sun canopy and three sides- 316 box section construction with roof and side panels
	d documentation package comprises User Manuals (one printed per analyzer system) plus CD ROM containing Set, Calibration Certificates and Pressure test certificates)
* SP-MC	Material Certificates for spare parts
* QMA601-DOC	Documentation package (per individual system (to Michell Standard SDR list))
* QMA601-DOC-E	Electronic Documentation Booklet - EDB (per individual system (to Michell Standard SDR list). Each section of the EDB w
* QMA601-DOC-ADH	Duplicate of DOC package (each hard copy)
* QMA601-DOC-ADS	Duplicate of DOC package (each soft copy (CDROM))
* QMA601-DOC-ADE	Duplicate of DOC-E package (on CDROM)
* QMA601-DOC-CVDR	Documentation package for customer specific VDR
* QMA601-DOC-CP	Document package on customer headed paper (per individual system (to Michell Standard SDR list))
* QMA601-DOC-CP-ADH	Duplicate of DOC package on customer headed paper (each hard copy)
* QMA601-DOC-CP-ADS	Duplicate of DOC package on customer headed paper (each soft copy (CDROM))
* QMA601-DRG	Drawings for approval before build
Packaging	
* QMA-MON-PAC	Packing for Analyzer, dryer column and back pressure regulator only (crate for air & road)
* QMA601-SYS-PAC1	Packing for Main Unit with Indoor Sampling System (crate for air & road)
* ONA CO1 CVC DA C2	Packing for Main Unit with Outdoor Sampling System (crate for air & road)
* QMA601-SYS-PAC2	
* QMA601-SYS-PAC2 * QMA601-SYS-PAC3	Packing for Mounting Frame and accessories only (crate for air & road)
	Packing for Mounting Frame and accessories only (crate for air & road)  Packing for Heat Trace line up to 15m length (crate for air & road)

### **Process Analyzers**

Additional Services	Additional Services	
QMA601-CAL	In-house calibration of QMA601 (includes replacement moisture generator, desiccant charge and contamination adsorbent (if applicable))	
** QMA601-FAT1	One day FAT pre-delivery inspection / or first day of inspection	
** QMA601-FAT2	Each consecutive day of FAT pre-delivery inspection	
** GEN-FAT-ST8	8 hour unwitnessed stability test	
** GEN-FAT-ST12	12 hour unwitnessed stability test	
** GEN-FAT-ST24	24 hour unwitnessed stability test	
Service Spares	·	
QMA601-SOA-0.5P	QMA601 Sample block/oven assembly (calibrated with ~0.5ppmv MG, 2 barg input, 1 barg back pressure)	
QMA601-SOA-5P	QMA601 Sample block/oven assembly (calibrated with ~5ppmv MG, 2 barg input, 1 barg back pressure)	
QMA601-SOA-50P	QMA601 Sample block/oven assembly (calibrated with ~50ppmv MG, 2 barg input, 1 barg back pressure)	
QMA601-SHMI	QMA601 Display assembly	
QMA601-SDA	QMA601 Dryer assembly	
QMA601-SCT	QMA601 Contamination trap assembly	
QMA-SMG-0.5P	Replacement Low Range (~0.5ppmv) Moisture Generator	
QMA-SMG-5P	Replacement Medium Range (~5ppmv) Moisture Generator	
QMA-SMG-50P	Replacement High Range (~50ppmv) Moisture Generator	
QMA601-SFK	Filter kit for Coalescer and Membrane Separator - each	
QMA601-SPTK	Sensor Pressure Test Kit (Michell engineer installation only)	
QMA-THERMAL-FUSE	QMA401/601 Thermal Fuse	

<sup>\*</sup> On certain labor intensive services, no discount can be offered. These items are always offered at list price.

Please note: Michell Instruments adopts a continuous development program which sometimes necessitates specification changes without notice. Please contact us for latest version. Issue No: QMA601\_97490\_V10\_UK\_0623

<sup>\*\*</sup>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.