

## CONDUMAX II

Automatic, online measurement of hydrocarbon and water dew-point in natural gas.

Product Parent Code: CD2-MON Condumax II analyzer only		
Product Ordering Code {Feature A}+{Feature B}+{Feature C}+{Feature M}		
Feature	Item	Description
Feature {A}	<b>Base Model</b>	
	CD2-MON	EExd certified, automatic, online HC and water dew-point in natural gas analyser. Fundamental chilled mirror, 0.5C HC DP accuracy. Mains power, capacitive touch screen, integrated pressure reading, flow alarms. Modbus RTU, two 4-20mA outputs. Op. pressure 15 to 100 barg, flow rate 0.06 m3/h (1 L/min)
Feature {B}	<b>Analyzer</b>	
	B4	Hydrocarbon dp
	B5	Hydrocarbon and Water dp IGT (IGT#8 natural gas moisture calculation)
	B6	Hydrocarbon and Water dp ISO (ISO18453 natural gas moisture calculation)
Feature {C}	<b>Hazardous Configurations</b>	
	C1	ATEX/IECEX certified
	C2	North American certified
Feature {M}	<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>		

Product Parent Code: CD-SYS-I/CD-SYS-M Condumax II with Sampling System		
Product Ordering Code {Feature A}+{Feature B}+{Feature C}+{Feature D}+{Feature E}+{Feature F}+{Feature M}		
Feature	Item	Description
Feature {A}	<b>Base Model</b>	
	CD2-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 (0.4 m3/h (6.6 L/min) nominal
	CD2-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 (0.4 m3/h (6.6 L/min) nominal
Feature {AB}	<b>Analyzer</b>	
	AB7	Hydrocarbon dp analyzer ATEX/IECEX
	AB8	Hydrocarbon & water dp IGT analyzer ATEX / IECEX
	AB9	Hydrocarbon & water dp ISO analyzer ATEX / IECEX
	AB10	Hydrocarbon dp analyzer North American Certified
	AB11	Hydrocarbon & water dp IGT analyzer North American Certified
	AB12	Hydrocarbon & water dp ISO analyzer North American Certified
Feature {B}	<b>Hazardous Configurations</b>	
	B1	ATEX/IECEX certified 240VAC
	B2	North American Certified (Class 1 Div 2) 110VAC
	B3	ATEX/IECEX certified 110VAC
Feature {C}	<b>System</b>	
	C1	Standard indoor sampling system HC dp (with 316 SS mounting plate)
	C2	Standard outdoor sampling system HC dp (with 304 SS enclosure)
	C3	Standard outdoor sampling system HC dp (with 316 SS enclosure)
	C4	Standard indoor sampling system HC dp & W dp (with 316 SS mounting plate)
	C5	Standard outdoor sampling system HC dp & W dp (with 304 SS enclosure)
	C6	Standard outdoor sampling system HC dp & W dp (with 316 SS enclosure)
Feature {D}	<b>Heating (Outdoor systems only)</b>	
	D0	No Heater required
	D1	240VAC Fixed 20°C
	D2	110VAC Fixed 20°C
	D3	240VAC adjustable 0-60°C (ATEX/IECEX)
	D4	110VAC adjustable 0-60°C (ATEX/IECEX)
	D5	240VAC Fixed 40°C (not for use with E6-E7)
	D6	110VAC Fixed 40°C (not for use with E6-E7)
Feature {E}	<b>Enclosure cooling (Outdoor systems only)</b>	
	E0	No cooling required
	E4	240VAC (ATEX/IECEX) Enclosure cooling required ≥ 45°C ambient (Adjustable setpoint, instrument air supply required)
	E5	110VAC (ATEX/IECEX) Enclosure cooling required ≥ 45°C ambient (Adjustable setpoint, instrument air supply required)
	E6	240VAC (ATEX/IECEX) Enclosure ventilation fan for temperature 30°C max. ambient (Fixed setpoint, supplied with 316 SS enclosure)
	E7	Enclosure cooling (mechanical control) for temperature 45°C max. ambient (instrument air supply required)

## Process Analyzers

Feature {F}	Heat Trace Line	
	F0	No heat trace option
	F1	240VAC 3m trace heated sample line assembly (6mm O.D. AISI 316)
	F2	240VAC 3m trace heated sample line assembly (1/4" O.D. AISI 316)
	F3	110VAC 3m trace heated sample line assembly (6mm O.D. AISI 316)
	F4	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	
Feature {M}	Material Certification	
	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 services, no discount can be offered. These items are always offered at list price.**

### Ordering Example

<b>CD2-MON+B3+C1+M0</b>	<b>Condumax II Main Unit for hydrocarbon and water dew-point measurement, ISO calculation, ATEX certified, no material certificates</b>
<b>CD2-SYS-I+AB2+B1+C5+D3+E0+F0+M1</b>	<b>Condumax II outdoor 304 SS sampling system (HC dp &amp; W dp IGT analyzer ATEX / IECEx), Imperial fittings, thermostat upgrade with 3.1 material certificates &amp; ATEX certification</b>

## CONDUMAX II ACCESSORIES, SPARE PARTS, DOCUMENTATION & SERVICES

Order Codes	Product / Description
<b>Spares &amp; Accessories</b>	
CD2-HPR-240	Stand alone heated pressure reduction system 240VAC (300 barg/4350 psig inlet, max 507psig/35barg outlet) - ATEX only
CD2-HPR-115	Stand alone heated pressure reduction system 115VAC (300 barg/4350 psig inlet, max 507psig/35barg outlet) - ATEX only
CD2-SYS-SC	Michell standard mounting frame, floor standing with sun canopy and three sides- 316 box section construction with roof and side panels
CD2-SCR-002	HC dew-point sensor cell assembly (with Storm pressure transmitter)
CD2-WDC-002	Water dew-point sensor assembly (with Storm pressure transmitter)
CD2-SX-WDC-002	Water dew-point sensor exchange (fully calibrated)
<b>001 applies to sensors fitted with a Druck pressure transducer with mV output. This applies to older Condumax II until January 2006</b>	
<b>002 applies to sensors fitted with a GEM Storm 4-20mA pressure transmitter. This applies to all Condumax II from January 2006, serial number 120477 to current day.</b>	
<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
* CD2-DOC	Documentation package (per individual system (to Michell Standard SDR list))
* CD2-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
* CD2-DOC-ADH	Duplicate of DOC package (each hard copy)
* CD2-DOC-ADS	Duplicate of DOC package (each soft copy (CDROM))
* CD2-DOC-ADE	Duplicate of DOC-E package (on CDROM)
* CD2-DOC-CVDR	Documentation package for customer specific VDR
* CD2-DOC-CP	Document package on customer headed paper (per individual system (to Michell Standard SDR list))
* CD2-DOC-CP-ADH	Duplicate of DOC package on customer headed paper (each hard copy)
* CD2-DOC-CP-ADS	Duplicate of DOC package on customer headed paper (each soft copy (CDROM))
* CD2-DRG	Drawings for approval before build
<b>Packaging</b>	
* CD2-MON-PAC	Packing for Main Unit only (crate for air and road)
* CD2-SYS-PAC	Packing for main unit with sampling system (crate for air and road)
<b>Consumable items - sampling systems only:</b>	
CD2-SFK	Filter kit for Coalescer and Membrane Separator – each (systems from November 2015)
CD2-MFE	Membrane filter elements pack of 5 + 5 Viton O-ring (systems up to October 2015)
<b>Additional Services</b>	
* CD2-COM	Commissioning & training on-site (as engineer rates price list)
** CD2-FAT1	One day FAT pre-delivery inspection / or first day of inspection
** CD2-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
CDS-Service	Refurbish and recalibrate Condumax HC Cell (includes Peltier replacement - further costs may be incurred if other items need replacement) - see Calibration & Service Exchange page
BB-Service	Full test and adjustment (if necessary) of all internal components (other than measurement cells) of the Condumax II unit
SYS-Service	BB-Service plus full system functional test, filter change and purge
<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: Condumax II\_97149\_V10\_UK\_0623