

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

Product Parent Code: CD2-MON
Condumax II analyzer only

Base Model

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)

CD2-MON

Analyzer

Hydrocarbon dp	A
Hydrocarbon and Water dp IGT (IGT#8 natural gas moisture calculation)	B
Hydrocarbon and Water dp ISO (ISO18453 natural gas moisture calculation)	C

Hazardous Configurations

ATEX/IECEX certified	A
North American certified	B

NOTE: CD2-MON-Mx (Material Certificates) should be added as an additional line item if required.

Product Parent Code: CD-SYS-I/CD-SYS-M
Condumax II with Sampling System

Base Model

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-M

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

CD2-SYS-I

Analyzer

Hydrocarbon dp analyzer ATEX/IECEX	AB7
Hydrocarbon & water dp IGT analyzer ATEX / IECEX	AB8
Hydrocarbon & water dp ISO analyzer ATEX / IECEX	AB9
Hydrocarbon dp analyzer North American Certified	AB10
Hydrocarbon & water dp IGT analyzer North American Certified	AB11
Hydrocarbon & water dp ISO analyzer North American Certified	AB12

Hazardous Configurations

ATEX/IECEX certified 240VAC	B1
North American Certified (Class 1 Div 2) 110VAC	B2
ATEX/IECEX certified 110VAC	B3

System

Standard indoor sampling system HC dp (with 316 SS mounting plate)	C1
Standard outdoor sampling system HC dp (with 316 SS enclosure)	C3
Standard indoor sampling system HC dp & W dp (with 316 SS mounting plate)	C4
Standard outdoor sampling system HC dp & W dp (with 316 SS enclosure)	C6

Heating (Outdoor systems only)

No Heater required	D0
240VAC Fixed 20°C	D1
110VAC Fixed 20°C	D2
240VAC adjustable 0-60°C (ATEX/IECEX)	D3
110VAC adjustable 0-60°C (ATEX/IECEX)	D4
240VAC Fixed 40°C (not for use with E6-E7)	D5
110VAC Fixed 40°C (not for use with E6-E7)	D6

Enclosure cooling (Outdoor systems only)		
No cooling required	E0	
240VAC (ATEX/IECEX) Enclosure cooling required $\geq 45^{\circ}\text{C}$ ambient (Adjustable setpoint, instrument air supply required)	E4	
110VAC (ATEX/IECEX) Enclosure cooling required $\geq 45^{\circ}\text{C}$ ambient (Adjustable setpoint, instrument air supply required)	E5	
240VAC (ATEX/IECEX) Enclosure ventilation fan for temperature 30°C max. ambient (Fixed setpoint, supplied with 316 SS enclosure)	E6	
Enclosure cooling (mechanical control) for temperature 45°C max. ambient (instrument air supply required)	E7	
Heat Trace Line		
No heat trace option	F0	
240VAC 3m trace heated sample line assembly (6mm O.D. AISI 316)	F1	
240VAC 3m trace heated sample line assembly (1/4" O.D. AISI 316)	F2	
110VAC 3m trace heated sample line assembly (6mm O.D. AISI 316)	F3	
110VAC 3m trace heated sample line assembly (1/4" O.D. AISI 316)	F4	
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	
* On certain labor intensive services, no discount can be offered. These items are always offered at list price.		

Ordering Example	
CD2-MON-BB	EExd certified, automatic, online HC and water dew-point in natural gas analyser. Fundamental chilled mirror, 0.5C HCDP 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) Hydrocarbon and Water dp IGT (IGT#8 natural gas moisture calculation) North American certified
CD2-SYS-I+AB11+B2+C6+D4+E0+F0+M1	Hydrocarbon & water dp IGT analyzer North American Certified, North American Certified (Class 1 Div 2) 110VAC, Standard outdoor sampling system HC dp & W dp (with 316 SS enclosure), 110VAC adjustable 0-60°C (ATEX/IECEX), No cooling required, No heat trace option, Material certificate to BS EN 10204 – type 3.1.
CONDUMAX II ACCESSORIES, SPARE PARTS, DOCUMENTATION & SERVICES	
Material Certification	
* CD2-MON-M1	Material certificate to BS EN 10204 – type 3.1
* CD2-MON-M2	Material certificate to BS EN 10204 – type 3.1 + NACE MR0175 Conformity
Spares & Accessories	
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 for 1 Channel system
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)
001 applies to sensors fitted with a Druck pressure transducer with mV output. This applies to older Condumax II until January 2006	
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.	

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
* 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-ADE	Duplicate of DOC-E package (on CDROM)
* CD2-DOC-CVDR	Documentation package for customer specific VDR
* CD2-DOC-CPE	Document package on customer headed paper (per individual system (to Michell Standard SDR list))
* CD2-DOC-CP-ADE	Duplicate of DOC package on customer headed paper (each soft copy (CDROM))
* CD2-DRG	Drawings for approval before build
Packaging	
* 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)
* CD2-SYS-PAC2	Packing for Sampling System and frame/suncanopy (crate for air & road)
Consumable items - sampling systems only:	
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)
Additional Services	
* 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-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
* 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.	