XTC601
Binary Gas Analyzer

Fixed Configurations	
Hydrogen (H2) Applications	
XTC601-EX1-H2O2-5	SIL2 capable Hazardous Area certified H2 in O2 analyzer: Range: 0…5% with Ekraz O-ring, 60°C Cell and flame arrestors. Supplied with Material certificates and CFOS. Equivalent Code - XTC601+EX1+C3+D1+E2+F3+G3+L1+M1
XTC601-EX1-H2O2-2	SIL2 capable Hazardous Area certified H2 in O2 analyzer: Range: 0…2% with Ekraz O-ring, 60°C Cell and flame arrestors. Supplied with Material certificates and CFOS. Equivalent Code - XTC601+EX1+C3+D1+E2+F2+G3+L1+M1

Configurable Product		
Product Ordering Code {Feature A}–{Feature B}+{Feature C}+…+{Feature M}+{Feature X (only if required)}		
Feature	**Item**	**Description**
Feature {A}	**Base Model**	
	XTC601	Process Binary Gas analyzer utilising thermal conductivity technology with a sealed reference sensor. Standard features include: HMI (backlit LCD & 4 buttons), IP66 rated wall mounted enclosure, 316 stainless steel sample path, 2 x 4-20mA outputs, MODBUS RTU (RS485), 2 x concentration alarms, 3 x M20 cable entries and 24Vdc powered.
Feature {B}	**Case & Area Class**	
	GP1	General Purpose Analyzer (1/4" NPT(F) gas connections)
	GP2	General Purpose Analyzer with flame arrestors (1/8" NPT(F) gas connections)
	EX1	Explosion-proof Analyzer for use in hazardous areas with flame arrestors (1/8" NPT(F) gas connections)
Feature {C}	**Cell O-Ring Material**	
	C1	Viton
	C2	Silicone - NOT for use with enriched O2 (ie O2 > 21%)
	C3	Ekraz Sensor Cell O-ring
Feature {D}	**Target Gas - verify selection using Sensor Matrix**	
	D1	Hydrogen (H2) (NOT GP1)
	D2	Helium (He)
	D3	Methane (CH4) (NOT GP1)
	D4	Argon (Ar)
	D5	Carbondioxide (CO2)
	D6	Nitrogen
	Ds	Special Target Gas
Feature {E}	**Background Gas - verify selection using Sensor Matrix**	
	E1	Nitrogen (N2)
	E2	Oxygen (O2) - analyzer supplied CFOS
	E3	Air
	E4	Argon (Ar)
	E5	Carbondioxide (CO2)
	E6	Methane (CH4) (NOT GP1)
	E7	Non-methanane hydrocarbons (NMHC) (NOT GP1)
	Es	Special Background Gas
Feature {F}	**Range - verify selection using Sensor Matrix**	
	F1	Range 0 to 1% (H2 & He Target Gas only)
	F2	Range 0 to 2% (H2 & He Target Gas only)
	F3	Range 0 to 5%
	F4	Range 0 to 10%
	F5	Range 0 to 20%
	F6	Range 0 to 30%
	F7	Range 0 to 50%
	F8	Range 0 to 100%
	F9	Range 50 to 100%
	F10	Range 70 to 100%
	F11	Range 80 to 100%
	F12	Range 90 to 100%
	F13	Range 95 to 100% (H2 & He Target Gas only)
Feature {G}	**Cell temperature**	
	G1	50°C
	G3	60°C
Feature {L}	**SIL**	
	L0	Standard product
	L1	Meets the requirements of IEC61508 (SIL 2 Capable)
Feature {M}	**Material Certification**	
	M0	No material certification
	* M1	Material certificate to BS EN 10204 – type 3.1
Feature {X}	**Build Options**	
	X3	CFOS - Cleaned for O2 service (standard with O2 ranges >25% O2)
	X9	Product Review Required
NOTE: For other gas combinations and measurement ranges please contact O2 Support Group		
* On certain labor intensive services, no discount can be offered. These items are always offered at list price.		

XTC601-GP2/EX Approved Range / Gas Combinations (Background Gas O2 or Air)

O2 / Air
Background Gas

Target Gas		F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13
		0 to 1%	0 to 2%	0 to 5%	0 to 10%	0 to 20%	0 to 30%	0 to 50%	0 to 100%	50 to 100%	70 to 100%	80 to 100%	90 to 100%	95 to 100%
D1	H2			Note 1					Note 2	Note 2	Note 2	Note 2	Note 2	Note 3
D2	He													
D3	CH4			Note 4	Note 2	Note 2	Note 2	Note 2	Note 2	Note 2				
D4	Ar													
D5	CO2													
D6	N2						Use XTP601-EX O2 in N2							

- Good (green)
- NOT Allowed (red)
- Flammable gas (orange)

Note 1 Calibration points up to 3.8%
Note 2 Calibration points in flammable region performed in N2
Note 3 Calibration points above 95.4% O2
Note 4 Calibration points up to 4.2%

XTC601 Additional Options

Item Number	Description
Calibration	
XTP-ATP	Additional Test Point - Contact O2 Support Group for Pricing
* XT-Recal	Factory Recalibration - advise points at time of order
Warranty	
* XTC601-EW24	Extended warranty 24 months from invoice date
* XTC601-EW36	Extended warranty 36 months from invoice date
Documentation	
* EXPORT-DOCS	Certificate of Origin from the Chamber of Commerce
* GEN-DOC	Certificate of Conformity

XTC601 Spares and Accessories

Item Number	Description
GUB accessories	
XTC601-BLANKPLUG	Blanking Plug
XTC601-M20CONDUIT	M20 Conduit Entry 3/4" NPT (Nickel Plated Brass)
XTC601-M20COMPRESS	M20 Cable Gland (Nickel Plated Brass 20S - Compression) (GP1 only)
XTC601-M20BARRIER	M20 Cable Gland (Nickel Plated Brass 20S - Barrier)
XTP601-14198	GUB Lid o-ring
Gas fitting adaptors - for GP1 (1/4" NPTF)	
XTC601-1/4"	1/4" NPT to 1/4" Swagelok Tube Adaptor
XTC601-6MM	1/4" NPT to 6mm Swagelok Tube Adaptor
XTC601-1/4"-SC11	1/4" NPT to 1/4" Swagelok Tube Adaptor, Oxygen cleaned
XTC601-6MM-SC11	1/4" NPT to 6mm Swagelok Tube Adaptor, Oxygen cleaned
GEN-20114C	1/4" NPT to 1/8" Swagelok Tube Adaptor
Gas fitting adaptors - for GP2 & EX1 (1/8" NPTF)	
GEN-2PK-FIT-A	1/8" NPT to 1/8" Swagelok Tube Adaptor
GEN-2PK-FIT-B	1/8" NPT to 1/4" Swagelok Tube Adaptor
GEN-2PK-FIT-C	1/8" NPT to 6mm Swagelok Tube Adaptor
Display	
XTC601-GP-HMI	Display assembly for GP model
XTC601-EX-HMI	Display assembly for EX model
Miscellaneous	
XTC601-RC	Ribbon cable assembly
PTFE-TAPE-02	Unsintered PTFE tape for use with enriched oxygen samples

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

XTC601-HCG
Binary Gas Analyzer for Hydrogen Cooled Generators

Configurable Product		
Product Ordering Code {Feature A}-{Feature B}+{Feature C}+…+{Feature E}+{Feature M}+{Feature X (only if required)}		
Feature	**Item**	**Description**
Feature {A}	**Base Model**	
	XTC601	Process Binary Gas analyzer utilising thermal conductivity technology with a sealed reference sensor. Standard features include: HMI (backlit LCD & 4 buttons), IP66 rated wall mounted enclosure, 316 stainless steel sample path, 2 x 4-20mA outputs, MODBUS RTU (RS485), 2 x concentration alarms, 3 x M20 cable entries and 24Vdc powered.
Feature {B}	**Case & Area Class**	
	EX1	Explosion-proof Analyzer for use in hazardous areas with flame arrestors (1/8" NPT(F) gas connections)
Feature {C}	**Cell O-Ring Material**	
	C1	Viton
Feature {D}	**Gas**	
	D-HCG	H2/Air+H2/CO2+CO2/Air
Feature {E}	**Background Gas**	
	E0	HCG only
Feature {F}	**Range (H2/Air only)**	
	F10	Range 70 to 100%
	F11	Range 80 to 100%
	F12	Range 90 to 100%
Feature {G}	**Background Gas**	
	G3	60°C
Feature {M}	**Material Certification**	
	M0	No material certification
	* M1	Material certificate to BS EN 10204 – type 3.1
* On certain labor intensive services, no discount can be offered. These items are always offered at list price.		

XTC601 Additional Options

Item Number	Description
Warranty	
* XTC601-EW24	Extended warranty 24 months from invoice date
* XTC601-EW36	Extended warranty 36 months from invoice date
Documentation	
* EXPORT-DOCS	Certificate of Origin from the Chamber of Commerce
* GEN-DOC	Certificate of Conformity

XTC601 Spares and Accessories

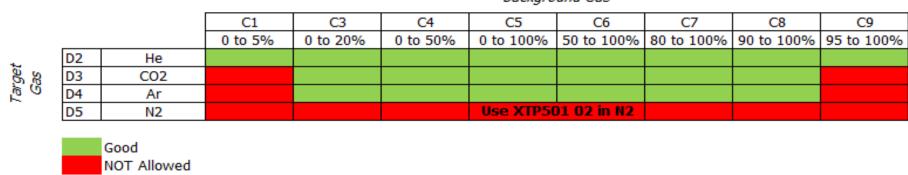| Calibration	
* XT-Recal	Factory Recalibration - advise points at time of order
GUB accessories	
XTC601-BLANKPLUG	Blanking Plug
XTC601-M20CONDUIT	M20 Conduit Entry 3/4" NPT (Nickel Plated Brass)
XTC601-M20COMPRESS	M20 Cable Gland (Nickel Plated Brass 20S - Compression) (GP1 only)
XTC601-M20BARRIER	M20 Cable Gland (Nickel Plated Brass 20S - Barrier)
XTP601-14198	GUB Lid o-ring
Gas fitting adaptors - for GP2 & EX1 (1/8" NPTF)	
GEN-2PK-FIT-A	1/8" NPT to 1/8" Swagelok Tube Adaptor
GEN-2PK-FIT-B	1/8" NPT to 1/4" Swagelok Tube Adaptor
GEN-2PK-FIT-C	1/8" NPT to 6mm Swagelok Tube Adaptor
Display	
XTC601-EX-HMI	Display assembly for EX model
Miscellaneous	
XTC601-RC	Ribbon cable assembly
PTFE-TAPE-02	Unsintered PTFE tape for use with enriched oxygen samples
* On certain labor intensive services, no discount can be offered. These items are always offered at list price.	

XTC501
Binary Gas Analyzer

Fixed Configurations	
Hydrogen (H2) Applications	
XTC501-1-H2N2-5	General Purpose H2 in N2 analyzer: Range: 0...5% Supplied with display, Power, Output & Alarm cables, Ekraz Sensor Cell O-ring and Material certificates. Equivilent Code - XTC501+GP1+C1+D1+E1+F2+M1+X1
XTC501-1-H2N2-10	General Purpose H2 in N2 analyzer: Range: 0...10% Supplied with display, Power, Output & Alarm cables, Ekraz Sensor Cell O-ring and Material certificates. Equivilent Code - XTC501+GP1+C2+D1+E1+F2+M1+X1
XTC501-1-H2N2-100	General Purpose H2 in N2 analyzer: Range: 0...100% Supplied with display, Power, Output & Alarm cables, Ekraz Sensor Cell O-ring and Material certificates. Equivilent Code - XTC501+GP1+C5+D1+E1+F2+M1+X1
XTC501-1-H2O2-5	General Purpose H2 in O2 analyzer: Range: 0...5% Supplied with display, Power, Output & Alarm cables, Ekraz Sensor Cell O-ring, cleaned for O2 service and with Material certificates. Equivilent Code - XTC501+GP1+C1+D1+E4+F2+M1+X1+X3

Configurable Product		
Product Ordering Code {Feature A}–{Feature B}+{Feature C}+{Feature D}+{Feature E}		
Feature	**Item**	**Description**
Feature {A}	**Base Model**	
	XTC501	Process Binary Gas analyzer utilising thermal conductivity technology with a sealed reference sensor. Standard features include: 316 stainless steel sensor heated to 50C, 316 stainless steel sample path, viton O-ring seal, 1/8" bulkhead gas fittings, 2 x 4-20mA outputs, MODBUS RTU (RS485), 2 x concentration alarms, 24Vdc powered and housed in an IP55 rated enclosure.
Feature {B}	**Type**	
	GP1	General Purpose Analyzer with display
	GP2	General Purpose Transmitter
Feature {C}	**Range - verify selection using Sensor Matrix**	
	C1	Range 0 to 5% (He Target Gas only)
	C2	Range 0 to 10%
	C3	Range 0 to 20%
	C4	Range 0 to 50%
	C5	Range 0 to 100%
	C6	Range 50 to 100%
	C7	Range 80 to 100%
	C8	Range 90 to 100%
	C9	Range 95 to 100% (He Target Gas only)
Feature {D}	**Target Gas - verify selection using Sensor Matrix**	
	D2	Helium (He)
	D3	Carbon Dioxide (CO2)
	D4	Argon (Ar)
	D5	Nitrogen (N2)
Feature {E}	**Background Gas - verify selection using Sensor Matrix**	
	E1	Nitrogen (N2)
	E2	Air
	E3	Carbon Dioxide (CO2)
	E4	Oxygen (O2) - analyzer supplied CFOS
	E5	Argon (Ar)
Feature {F}	**Cables**	
	F0	Loose connectors
	F1	Power & Output (5m) and loose connector
	F2	Power, Output & Alarm (5m) and loose connector
	F3	Power, Output, Alarm and Input (5m)
Feature {M}	**Material Certification**	
	M0	No material certification
	* M1	Material certificate to BS EN 10204 – type 3.1
Feature {X}	**Special options (Optional)**	
	X1	Ekraz Sensor Cell O-ring
	X3	CFOS - Cleaned for O2 service (standard with O2 ranges >25% O2)
	X9	Product Review Required
NOTE: The XTC501 is available with the listed background gases and with minimum range of 0-5%. We may offer special backgrounds or lower ranges with reduced accuracy on application. Orders will not be accepted unless application has been tested and authorisation to quote granted.		
* On certain labor intensive services, no discount can be offered. These items are always offered at list price.		

XTC501 Approved Range / Gas Combinations (Background Gas O2 or Air)

		C1	C3	C4	C5	C6	C7	C8	C9
		0 to 5%	0 to 20%	0 to 50%	0 to 100%	50 to 100%	80 to 100%	90 to 100%	95 to 100%
D2	He	Good	Good	Good	Good	Good	Good	Good	NOT Allowed
D3	CO2	NOT Allowed	Good	Good	Good	Good	Good	Good	NOT Allowed
D4	Ar	NOT Allowed	Good	Good	Good	Good	Good	Good	NOT Allowed
D5	N2	NOT Allowed	NOT Allowed	NOT Allowed	Use XTP501 O2 in N2			NOT Allowed	NOT Allowed

O2 / Air Background Gas (column header); Target Gas (row header)

- Green = Good
- Red = NOT Allowed

XTC501 Additional Options

Item Number	Description
Calibration	
XTC-ATP	Additional Test Point - Contact O2 Support Group for Pricing
* XT-Recal	Factory Recalibration - advise points at time of order
Warranty	
* XTC501-EW24	Extended warranty 24 months from invoice date
* XTC501-EW36	Extended warranty 36 months from invoice date
Documentation	
* EXPORT-DOCS	Certificate of Origin from the Chamber of Commerce
* GEN-DOC	Certificate of Conformity

XTC501 Spares and Accessories

Cables and connectors	
XTX501-HMI-IC-0.5	0.5m interconnect cable
XTX501-HMI-IC-01	1m interconnect cable
XTX501-HMI-IC-02	2m interconnect cable
XTX501-MCA	Mating Connector-alarms
XTX501-MCP	Mating Connector-power
XTX501-MCS	Mating Connector-signal output
XTX501-MCSI	Mating Connector-signal input
XTX501-MCA-05	Connector:Alarms with 5m cable fitted
XTX501-MCS-05	Connector:Signals out with 5m cable fitted
XTX501-MCSI-05	Connector:Signals in with 5m cable fitted
XTX501-MCP-05	Connector:Power with 5m cable fitted
XTX501-TC	Tamperproof cover for power interupt switch
Display	
XTX501-HMI-RD	Remote Display 501series for Transmitter configuration (GP2)

* 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: XTC Series Order Codes_ 97440_V16_UK_0724