

**XTC601**  
Binary Gas Analyzer

Fixed Configurations	
Hydrogen (H2) Applications	
XTC601-EX1-H202-5	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-H202-2	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}	<b>Base Model</b>	
	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}	<b>Case &amp; Area Class</b>	
	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}	<b>Cell O-Ring Material</b>	
	C1	Viton
	C2	Silicone - NOT for use with enriched O2 (ie O2 > 21%)
	C3	Ekraz Sensor Cell O-ring
Feature {D}	<b>Target Gas - verify selection using Sensor Matrix</b>	
	D1	Hydrogen (H2)
	D2	Helium (He)
	D3	Methane (CH4)
	D4	Argon (Ar)
	D5	Carbondioxide (CO2)
	D6	Nitrogen
	Ds	Special Target Gas
Feature {E}	<b>Background Gas - verify selection using Sensor Matrix</b>	
	E1	Nitrogen (N2)
	E2	Oxygen (O2) - analyzer supplied CFOS
	E3	Air
	E4	Argon (Ar)
	E5	Carbondioxide (CO2)
	E6	Methane (CH4)
	E7	Non-methanane hydrocarbons (NMHC)
	Es	Special Background Gas
Feature {F}	<b>Range - verify selection using Sensor Matrix</b>	
	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}	<b>Cell temperature</b>	
	G1	50°C
	G3	60°C
Feature {L}	<b>SIL</b>	
	L0	Standard product
	L1	Meets the requirements of IEC61508 (SIL 2 Capable)
Feature {M}	<b>Material Certification</b>	
	M0	No material certification
	* M1	Material certificate to BS EN 10204 – type 3.1
Feature {X}	<b>Individual Build Options</b>	
	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 Approved Range / Gas Combinations (Background Gas O2 or Air)**

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

**Note 1** Calibration points up to 4%

**Note 2** Calibration points in flammable region performed in N2

- Good
- NOT Allowed
- Flammable gas

**XTC601 Additional Options**

Item Number	Description
<b>Calibration</b>	
XTP-ATP	Additional Test Point - Contact O2 Support Group for Pricing
<b>Warranty</b>	
* XTC601-EW24	Extended warranty 24 months from invoice date
* XTC601-EW36	Extended warranty 36 months from invoice date
<b>Documentation</b>	
* EXPORT-DOCS	Certificate of Origin from the Chamber of Commerce
* GEN-DOC	Certificate of Conformity

**XTC601 Spares and Accessories**

<b>GUB accessories</b>	
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
<b>Gas fitting adaptors - for GP1 (1/4" NPTF)</b>	
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
<b>Gas fitting adaptors - for GP2 &amp; EX1 (1/8" NPTF)</b>	
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
<b>Display</b>	
XTC601-GP-HMI	Display assembly for GP model
XTC601-EX-HMI	Display assembly for EX model
<b>Miscellaneous</b>	
XTC601-RC	Ribbon cable assembly
PTFE-TAPE-02	Unsintered PTFE tape for use with enriched oxygen samples
<b>* On certain labor intensive services, no discount can be offered. These items are always offered at list price.</b>	

## 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}	<b>Base Model</b>	
	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}	<b>Case &amp; Area Class</b>	
	EX1	Explosion-proof Analyzer for use in hazardous areas with flame arrestors (1/8" NPT(F) gas connections)
Feature {C}	<b>Cell O-Ring Material</b>	
	C1	0
Feature {D}	<b>Gas</b>	
	D-HCG	H2/Air+H2/CO2+CO2/Air
Feature {E}	<b>Background Gas</b>	
	E0	HCG only
Feature {F}	<b>Range (H2/Air only)</b>	
	F10	Range 70 to 100%
	F11	Range 80 to 100%
	F12	Range 90 to 100%
Feature {G}	<b>Background Gas</b>	
	G3	60°C
Feature {M}	<b>Material Certification</b>	
	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
<b>Warranty</b>	
* XTC601-EW24	Extended warranty 24 months from invoice date
* XTC601-EW36	Extended warranty 36 months from invoice date
<b>Documentation</b>	
* EXPORT-DOCS	Certificate of Origin from the Chamber of Commerce
* GEN-DOC	Certificate of Conformity

## XTC601 Spares and Accessories

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
<b>Gas fitting adaptors - for GP2 &amp; EX1 (1/8" NPTF)</b>	
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
<b>Display</b>	
XTC601-EX-HMI	Display assembly for EX model
<b>Miscellaneous</b>	
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}	<b>Base Model</b>	
	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}	<b>Type</b>	
	GP1	General Purpose Analyzer with display
	GP2	General Purpose Transmitter
Feature {C}	<b>Range - verify selection using Sensor Matrix</b>	
	C1	Range 0 to 5%
	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% (H2 & He Target Gas only)
Feature {D}	<b>Target Gas - verify selection using Sensor Matrix</b>	
	D1	Hydrogen (H2)
	D2	Helium (He)
	D3	Carbon Dioxide (CO2)
	D4	Argon (Ar)
	D5	Nitrogen (N2)
Feature {E}	<b>Background Gas - verify selection using Sensor Matrix</b>	
	E1	Nitrogen (N2)
	E2	Air
	E3	Carbon Dioxide (CO2)
	E4	Oxygen (O2) - analyzer supplied CFOS
	E5	Argon (Ar)
Feature {F}	<b>Cables</b>	
	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}	<b>Material Certification</b>	
	M0	No material certification
	* M1	Material certificate to BS EN 10204 – type 3.1
Feature {X}	<b>Special options (Optional)</b>	
	X1	Ekraz Sensor Cell O-ring
	X3	CFOS - Cleaned for O2 service (standard with O2 ranges >25% O2)
	X9	Product Review Required
<p><b>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.</b></p>		
<p>* On certain labor intensive services, no discount can be offered. These items are always offered at list price.</p>		

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

		Target Gas				
		D1	D2	D3	D4	D5
Background Gas O2 / Air	O2 / Air	H2	He	CO2	Ar	N2
	C1	0 to 5%	Note 1			
	C3	0 to 20%				
	C4	0 to 50%				
	C5	0 to 100%				
	C6	50 to 100%				
	C7	80 to 100%				
	C8	90 to 100%				
	C9	95 to 100%				

**Note 1** Calibration points up to 4%

- Good
- NOT Allowed
- Flammable gas

**XTC501 Additional Options**

Item Number	Description
<b>Calibration</b>	
XTC-ATP	Additional Test Point - Contact O2 Support Group for Pricing
<b>Warranty</b>	
* XTC501-EW24	Extended warranty 24 months from invoice date
* XTC501-EW36	Extended warranty 36 months from invoice date
<b>Documentation</b>	
* EXPORT-DOCS	Certificate of Origin from the Chamber of Commerce
* GEN-DOC	Certificate of Conformity
* GEN-DOC-B	0

**XTC501 Spares and Accessories**

<b>Cables and connectors</b>	
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 interrupt switch
<b>Display</b>	
XTX501-HMI-RD	Remote Display 501series for Transmitter configuration (GP2)
<b>* On certain labor intensive services, no discount can be offered. These items are always offered at list price.</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: XTC Series Order Codes\_ 97440\_V15\_UK\_0723**