

# Discover

## ETG 6500 SYN WM

advanced multicomponent gas analyzer for Syngas



$O_2$ ,  $CO_2$ ,  $CO$ ,  $CH_4$ ,  $H_2$ ,  $C_nH_m$

### MONITORING

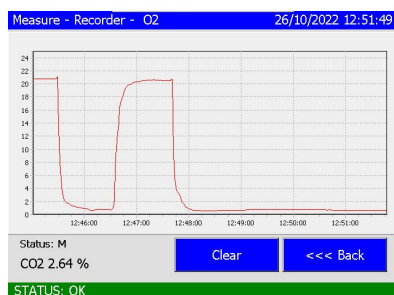
#### Suitable for applications:

- Syngas Plants
- Hythane Plants
- Research Center
- Syngas System

The ETG **6500 SYN** series of gas analyzers by ETG are the ideal solution for Syngas measurement applications because of their accuracy, stability, reliability, broad measurement range, and the variety of available form factors. Unlike other analyzers, ETG 6500 SYN non-dispersive infrared (NDIR) gas analyzers measure multiple gases in the instrument in special wavelength regions, interferences free from the other components.

The TCD detector used for  $H_2$  analysis is automatically corrected via proprietary algorithm for possible interferences by other gases. ETG analyzers have the ability to measure  $CH_4$ ,  $CO_2$ ,  $CO$ ,  $C_nH_m$ ,  $H_2$  and  $O_2$  providing the optimal combination of gases for Syngas process optimization. The enhanced optics and electronics of our NDIR analyzers have virtually eliminated zero drift after the initial warm up period. The temperature and pressure compensation eliminates the major causes of span drift in the instruments.

#### USER INTERFACE OVERVIEW



- Arm processor
- Touch Screen monitor
- Ethernet, Wi-Fi and USB Remoting
- Low cost of ownership
- Modbus, Pro ibus, Ethernet (optional) and others



## SPECIFICATIONS

- NDIR (for CO<sub>2</sub> CO and CH<sub>4</sub>) & TCD (for H<sub>2</sub>) technology
- N<sub>2</sub> and Heat value calculate by proprietary algorithm (standard)
- TCD for H<sub>2</sub>
- C<sub>n</sub>H<sub>m</sub> measured by NDIR detector (optional)

- Sample conditioning system (optional)
- Automatic Autozero free selectable
- Continuous Calculation Calorific Value
- Totally developed in Italy

<b>Response Time</b>	Response time are specified at a sample flow rate of 1 liter per minute through the MCA 100 sample cell
<b>Data Refresh Rate</b>	1 second
<b>Warm-up Time</b>	30 seconds ready, 3 minutes useable, 30 minutes full performance
<b>Operating Temperature</b>	0° to 70° C (32° to 158° F)
<b>Operating Humidity</b>	To 95% RH (Non-condensing)
<b>Operating Altitude</b>	-300 to 3.000 m (-1.000 to 10.000 ft)
<b>Communications</b>	USB port (standard)
<b>Case protections</b>	IP55
<b>Monitor</b>	Touch Screen 5.7" Resistive Type
<b>Calibration</b>	Zero & Span user selectable
<b>External Electrical Supply</b>	from 100 to 240 Vac 47-63 Hz
<b>Pneumatic Connection</b>	Rapid fittings 6.0 OD 4.0 ID
<b>Mechanical Dimensions &amp; Weight</b>	60 x 80 x 35 cm - 25 Kg

## TECHNICAL DATA

Measurement Method	Gas	Resolution	Range	Accuracy	Precision	Time
NDIR (Non-Dispersive Infrared)	Methane	0,01%	0-100%	+/-1% F.S.	+/-0,8%	T <sub>90</sub> & T <sub>10</sub> < 10 seconds
NDIR (Non-Dispersive Infrared)	Carbon Dioxide	0,01%	0-40%*	+/-1% F.S.	+/-1% F.S.	T <sub>90</sub> & T <sub>10</sub> < 10 seconds
	Carbon Monoxide	0,01%				
Electrochemical sensor	Oxygen	0,1%	0-25.00%	+/-2% F.S.	+/-2% F.S.	<40 seconds from ambient to 0.15 O <sub>2</sub>
Thermoconductibility	Hydrogen	0,1%	0-10% 0-20% 0-50% 0-100%	+/-2% F.S.	+/-2% F.S.	T <sub>90</sub> & T <sub>10</sub> < 20 seconds
NDIR (Non-Dispersive Infrared)	Hydrocarbon	0,01%	0- 5% 0-10% 0-20%	+/-1% F.S.	+/-1% F.S.	T <sub>90</sub> & T <sub>10</sub> < 10 seconds

\*other ranges on requests