Multigas Analyzer

Overview

SMART multigas analyzer is based on the modular design, for continuous measurement of gases in gas compounds, offers eight different type sensors for measurement depending on the requirements, and can measure up to six gases components.

Sensors are based on the Electrolysis(P2O5), capacitive, paramagnetic, zirconium oxide, electrochemical, Thermal Conductivity Detector, Infrared photometry, Ultraviolet photometry measuring principle.
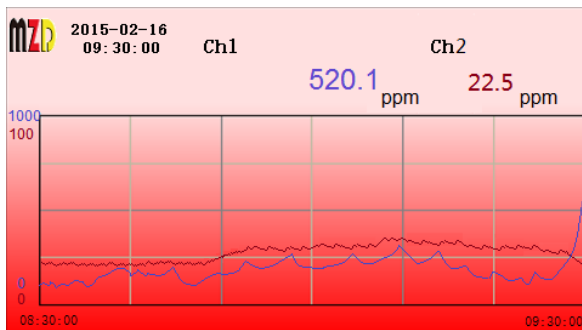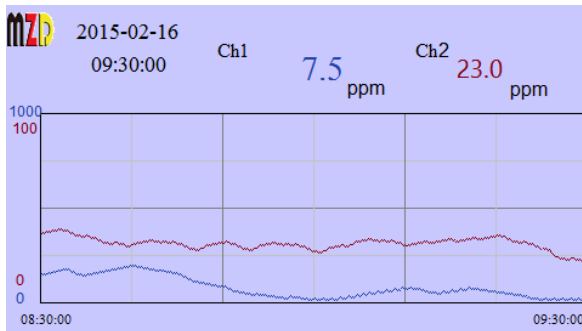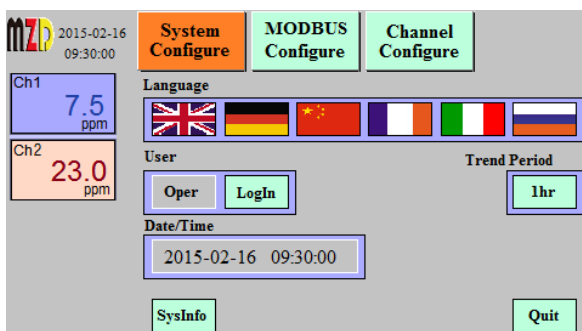
Application

- ● ASU(Air Separation Unit)
- ● Chemical, Pharmaceutical industry
- ● Petroleum and Petrochemical industry
- ● Metallurgical Industry
- ● Glass manufacturing
- ● Semiconductor industry
- ● Food and beverage industry
- ● Flare monitoring
- ● Nuclear,heat treatment, welding protection
- ● Environmental area monitoring
- ● Anesthesia, breathing and prenatal care
- ● Environmental and Process Measurement
   Technology (CEM)
- ● Engine development

Measurement components and ranges

- ❖ H2O: 0% ~ 20,000ppb up to 2000ppm
- ❖ O2:   0% ~ 10ppm up to 100%
- ❖ H2:   0% ~ 0.5 up to 100%
- ❖ He: 0% ~ 0.8 up to 100%
- ❖ CO2:   0% ~ 3 up to 100%
- ❖ N2:   0% ~ 3 up to 100%
- ❖ Ar: 0% ~ 3 up to 100%
- ❖ SF6:   0% ~ 2 up to 100%
- ❖ Ne: 0% ~ 1.5 up to 100%
- ❖ Kr: 0% ~ 2 up to 100%
- ❖ D2:   0% ~ 0.7 up to 100%
- ❖ CO: 0 ~ 200ppm up to 100%
- ❖ CO2:   0 ~ 50ppm up to 100%
- ❖ CH4:   0 ~ 500ppm up to 100%
- ❖ CnHm: 0 ~ 500ppm up to 100%
- ❖ N2O: 0 ~ 500ppm up to 100%
- ❖ SO2:   0 ~ 50ppm up to 10%
- ❖ NO: 0~ 300ppm up to 5,000ppm
- ❖ NO2:   0 ~ 50ppm up to 5,000ppm
                  0% ~ 5 up to 100%
- ❖ O3:   0 ~ 10ppm up to 5,000ppm
- ❖ Cl2:   0 ~ 500ppm up to 30%
- ❖ H2S: 0 ~ 100ppm up to 5,000ppm
- ❖ Extinguishing gas (R125):   0% ~ 5 up to 100%
- ❖ Other gases: on requirement
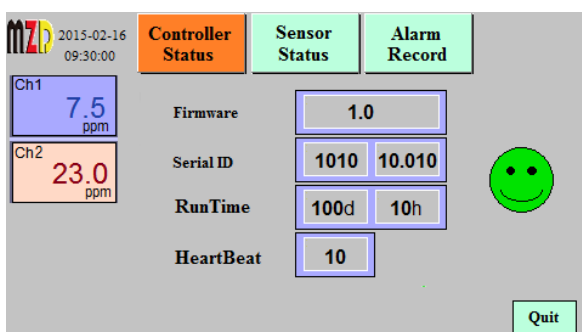
Features

❖ **Quick and convenient**

The navigation menu contains 6 languages, which can be operated easily.

❖ **Process safety**

4.3" or 7" large size color LCD touch screen, convenient and safe touch operation and debugging

Large size screen with red flashing alarm, clearly visible from long distances and in dark areas

Alarm immediately, safe the process

❖ **Alarm event record**

Real-time data curve display

Record function for up to 6,000 alarms

❖ **Expert calibration function**

Multi-point calibration function up to 9 point

❖ **Powerful self-diagnosis function**

Built-in heartbeat monitoring function and watchdog

Monitor the status of analyzer and sensors, and promptly remind customers to take necessary maintenance

High-standard hardware and software security and password protection

❖ **Powerful control function**

High(low) limit control function

Optional: Timer control(automatic cleaning) function

Optional: analog PID control function

Optional: PWM control function

❖ **Flexible fieldbus communication functions for IOT4.0**

Optional fieldbus MODBUS, HART, Foundation Fieldbus FF, PROFIBUS PA, PROFIBUS DP, etc.

Multigas Analyzer

Parameters

Measuring principle	Electrolysis(P2O5), Capacitive, Paramagnetic, Zirconium oxide, Electrochemical, Thermal Conductivity Detector, Infrared photometry, Ultraviolet photometry
Display	4.3" or 7" industrial color touch screen
Language	Multi-Language (English, German, Chinese, French,Italian, Russian or Customized)
Analog Output(Galvanic)	4~20mA, maximum load 500Ω
Relay Output(Galvanic)	Relay(2A, 230V AC freely set alarm), System alarm
Diagnosis function	Flow monitoring, Sensor and analyzer self-diagnosis,Heartbeat monitoring
Event Logger	Internal Flash,up to 6,000 alarm records
Control function	Optional Timer control function,PID,PWM
Calibration	Expert calibration function,Multi-point calibration function up to 9 point
Communication	RS485 MODBUS RTU,HART,Foundation Fieldbus FF,PROFIBUS PA,PROFIBUS DP,MODBUS TCP/IP,etc
Power	80~264V AC,1A or 19~28V DC,3A
Electrical protection	EMI/RFI CEI-EN55011–05/99
Ambient Temperature	-15~50℃
Storage and transport	-25~70℃
Ambient Humidity	0~90%RH
Diameter of connecting pipe	6mm

Wall-mounted(1~2Channels)	ABS,Gray RAL7045	213x185x84mm	IP65
	Aluminum,Gray	230x200x157mm	IP65, Exd IICT4
Laboratory	Aluminum,Black	250x144x184mm	IP40
Portable(1~2Channels)	ABS,Yellow	420x325x180mm	IP67
19" Rack(1~6Channels)	Aluminu,natural-coloured	483x133x238mm	IP40

Note:

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the agreed particulars shall prevail.

MZD does not accept responsibility for potential errors or possible lack of information in this document.

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