

Hydrocarbons In Water Monitor

THC-8280EX



THC-8280EX Hydrocarbons-In-Water monitor is a continuous sampling monitor designed for use where rapid response to light hydrocarbon (< C11) leaks or spills, along with high sensitivity and low maintenance, is required.

It provides advance warning against contaminated plant effluent, contaminated condensate return or cooling water, as well as monitoring of light volatile organics or Hydro-carbons in various other water streams.

THC-8280EX has a wide range of leak detection with the capability to detect from the very low ppm (part-per-million) range up to the two percent range. It is well suited for monitoring most volatile organics and hydrocarbons. It is effective for detection of benzene, 1,2-dichloroethane, propane, butanes, phenol, hexanes, and other organic compounds in water. THC-8280EX is not suitable for detection of heavy, non-volatile oils or greases.

Applications

- Spill detection of volatile organic and hydrocarbon in water
- Leak detection of hydrocarbons in cooling water or steam condensate returns
- Pollution abatement programs that require industrial effluent monitoring, including petroleum refineries, chemical/petrochemical plants, oil-fields, steel mills, automotive plants, food processing plants, and wastewater and sewage treatment plants

Features

- Detects volatile organics and hydrocarbons
- Rapid detection
- Low ppm to 2% detection level
- Continuous 4-20 mA DC isolated output
- No moving parts
- Low maintenance

Analytical Specifications

Measuring Range	0-100 ppm; additional ranges available at customer request
Detector	Hydrogen Flame Ionization Detector (FID)
Repeatability	±2% R.S.D. of full scale range
Ambient Operating Temp.	-20 to 50° C (32 to 120° F), freeze protection required

Functional Specifications

Power	110, 220 VAC ±10%, 50/60 Hz
Communication	1 x Ethernet 10BaseT Modbus TCP/IP, 1 x RS485 Modbus RTU
Output Signal	1 x Analog Output (4~20mA), 4 x Digital Output
Output Signal	4-20 mA, isolated
Alarm Contacts	Global fault alarm, High concentration alarm, Flow alarm and etc.

Sample Condition Specifications

Sample Flow Rate	30 to 50 cc per minute
Sample Pressure	Approximately 5 psig
Sample Temp.	Approximately 38° C (100° F)

Utility Requirements

Utility Gases	Hydrogen fuel 30 cc/min Nitrogen stripper gas 20~30 cc/min FID combustion air 300 cc/min
Utility Gases Pressure	H2(30~60 psig), Air(30~60 psig), N2(Approximately 15 psig)

Physical Specifications

Dimensions	500mm (W) x 489.3mm(D) x 850mm(H)
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Certificates

IECEX, ATEX, KCs   
(Zone1, Ex px IIC T3 Gb, Purge gas: AIR or N2)

Status page



Alarm page



- All alarms are checked by alarm page

Trend page



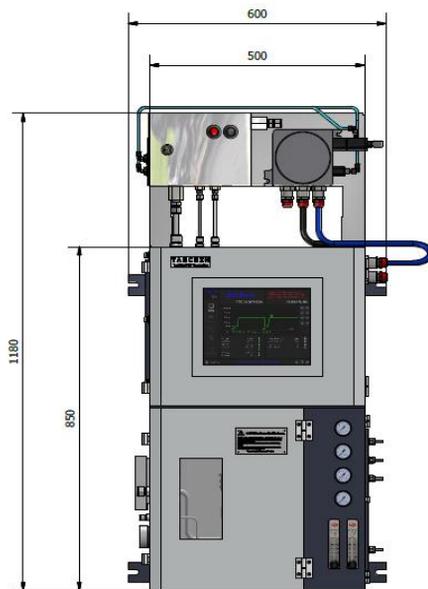
- Trend for Real-time measured values

Display

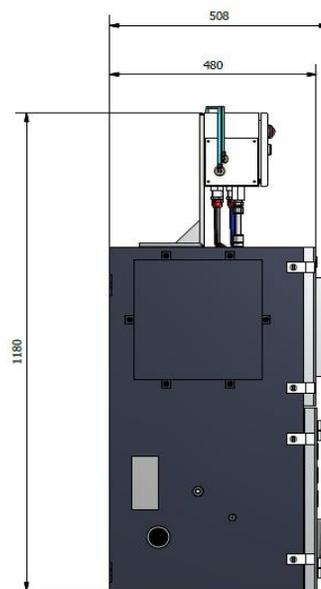
- 12.5 inch LCD Display
- Full touch screen
- High Quality LCD Display
- Low power, low-heat, full-brightness and vivid color display

Dimensions

- 500 x 508 x 850 mm (except for Purge Unit)



Front view



Left view