

메탄 측정기 (Portable Laser Diode CH₄ Analyzer)



Model : TDL-500

용도(Applications)

- 천연가스의 누출 탐지
- 매립지 가스의 방출량 측정
- 메탄가스의 누출 탐지

특징(Features)

- ppm 및 % 단위의 선택
- 시작 시 자동 셀프 테스트
- 넓은 투과형 LCD 화면
- 시각과 가청경보 표시기
- 20°C에서 8시간 이상 연속 사용 가능

사양(Specifications)

GAS RANGES

| | | |
|--------------------------------|-----------------|--|
| Response Time, T ⁹⁰ | CH ₄ | 4.5 seconds T10 standards : 2 seconds With suction rod T90 : 6 seconds With suction rod T10 : < 3.5 seconds |
|--------------------------------|-----------------|--|

Gases Measured CH₄ by laser spectroscopy

Range 0~10,000 ppm and 0 ppm to 100% gas volume

Typical Accuracy CH₄ detection threshold - 1 ppm

FACILITIES

Alarms They activate the visual (LED and LCD displays) and audio warnings Alarms include :
Methane CH₄ concentration threshold
Explosion risk due to methane CH₄ concentration
Pump stopped or pump error

Status Indicators Battery charge level
Pump status (speed 1 or speed 2)

| | |
|----------------|---|
| Gas Connection | Quick connect inlet coupling with locking mechanism: suction rod on right side Quick connect gas outlet coupling |
| Keypad | 5 Direct control keys Advanced function control with protected access scrolling menu |

PUMP

Output 45 l/h and 60 l/h - 2 speed pump with status indicator on display

ENVIRONMENTAL CONDITIONS

Operating Temperature Range - 15°C to +40°C

Relative Humidity From 55 to 80% relative humidity

Case Seal IP54

Barometric Pressure Atmospheric pressure 1013mbar (± 100mbar)

PHYSICAL

Weight 2.7 Kilograms (with batteries) (5.9lbs)

Size L 263mm, W 113mm, D 141mm (10.3 x 4.4 x 5.5 inches)

Case Material Polyamide reinforced with fibreglass and carbon. Front panel : anodised aluminium

Display Liquid crystal display with digits, icons and backlighting 3 areas :
Concentration measurements (0-10,000ppm and 0.0% to 100% gas volume)
Status indicator and dialogue window
Height of measurement character for ppm scale : 13mm
Height of measurement character for gas scale : 13mm

Storage Conditions (excluding batteries) Humidity : <90% relative humidity
Temperature : -20°C to +60°C

POWER SUPPLY

Battery Type Either with rechargeable battery pack: 3 x 1.2 V - 4 A/h NiCd in accordance with ATEX directive
OR with Alkaline type D batteries: 3 x 1.5 V alkaline cells in accordance with ATEX directive

Battery Life 8 hours at 20°C with all functions on (backlighting, pump on speed 2)
6 hours at temperatures below 0°C with all functions on (backlighting, pump on speed 2)
6 hours at temperatures above 35°C with all functions on (backlighting, pump on speed 2)

Battery Charger 100 to 240 VAC/ 50-60 Hz battery charger for ATEX battery pack

Charge Time Approximately 14 hours from complete discharge

구성(Configurations)

| | |
|--------------------------------|------|
| TDL-500 Laser Methane Analyser | 1 ea |
| Sampling rod | 1 ea |
| Carry case | 1 ea |