

The UPES can be used at any facility for monitoring and detecting gas concentrations and flame and fire conditions. After being programmed with the desired thresholds, the UPES system will transmit light (LED) and sound alarms as well as signals to responding devices, such as warning systems, automatic sprinkler systems, ventilation systems, and emergency shutdown controls.

The UPES is built on a standardized housing 3Ux19 inches (482x266x132 mm) based on a highway-module concept. The UPES contains the power supply module and the controller module. It has internal rack space capable of holding eight channel cards for up to 16 analog or 480 digital signaling devices. The UPES control panel can display up to three separate alarm levels per signaling device.





UPES

MULTI-CHANNEL CONTROLLER

Applications

- Drilling and production platforms
- Shipping tankers, freighters, and other vessels
- Fuel loading facilities
- Refineries, bulk terminals, and tank farms
- LNG/LPG processing and storage facilities
- Compressor stations and pipeline facilities
- Petrochemical, paint, and fertilizer plants
- Power plants and gas turbine facilities
- Transportation facilities (airports and subways)
- Oil and gas fired boilers / furnaces
- Environmental regulation monitoring

Features and benefits

- Maximum number of data channels: 1-16 analog or 1-480 digital channels offer broad gas-sensor coverage
- Configurable for permanent or periodic indication
- Three (3) programmable alarm relays, providing broad notification capability
- Digital (when connected to an RS-485 interface), analog and relay outputs provide reliable status information across a range of communication formats
- Modular measurement unit (3Ux19") is compatible with industry standard size rack or standalone installation
- Integrated two (2) line LED display for gas concentration
- High maximum lengths of communication line for long-distance notifications: via 4-20 mA analog, up to 3937 feet (1200m); via RS-485, up to 16400 feet (5000m)
- Compatible with PLC and SCADA
- High-level audible alert

Certifications



Class I, Division 1 Groups B, C & D T4 Ta = -40°F to +167°F (-40°C to +75°C) IP66



Groups B, C & D T4 Ta = -40°F to +167°F (-40°C to +75°C) IP66



-40°F to +185°F (-40°C to +85°C) CE Mark for EMC (TUV) CE Mark for IECEx **IP66**





Ex d IIC T4 -40°F to +185°F (-40°C to +85°C) IP66

Electrical Characteristics

110V (±10V), 60Hz (±1Hz) Frequency/ Voltage

24VDC from 18 to 32 VDC

Outputs RS-485 Modbus RTU compatible with PLC's, SCADA,

4-20 mA analog output

Relays (dry contact) with programmable

One relay for fault condition

-40°F to +158°F **Operating Temperature**

(-40°C to +70°C)

Humidity Up to 95%, non-condensing

(withstands up to 100% RH for short periods)

Mechanical Characteristics

Height 5.19" (132mm)

Width 19" (483 mm)

Depth 9.3" (266 mm)

Weight 37.47lbs (17.0kg)

Front Panel Indicators

- 3 color LED digital indicators
- 4 alarm LED indicators:

Green - Normal

- Low alarm

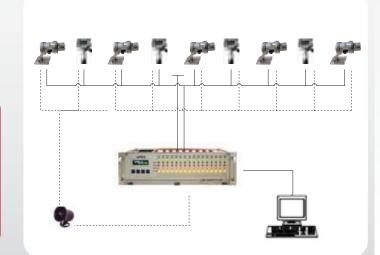
Two red - Auxiliary alarm

Three red - High alarm

Yellow - Fault



The network illustrated below, consisting of a UPES Multi-Channel Controller. SGOES and SSS-903 Gas Detectors. has the capacity to monitor potentially hazardous areas in proximity to oil and gas transit stations, gas and oil trunk pipelines, oil and gas storage tank farms, loading racks and similar facilities. When a lower explosive level (LEL) of gas presence (measured as a percent) has reached a preconfigured value, the UPES sounds an audible alert and sends alert signals to the control room monitoring devices while alerting operators. In addition, the UPES can send alert signals to facility level protection systems to initiate responses. These can include activating emergency facility shutdown, and automated ventilation system response.





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