

# OPTIC SERIES RACK MONITORS

## **CIVAICON 8100 SERIES OPTIC RACK MONITORS FEATURES & BENEFITS**



- Easy to mount and install
- Keyed bypass switch
- Monitors up to eight compartments
- Uses industry standard optic signal format

## **ORDER GUIDE**

8100 Explosion-proof Optic Monitor (NEMA 7)

8120 Explosion-proof Optic Monitor with Status Lights

8140 Explosion-proof Optic Monitor, Status Lights and Bypass Switch

8160 Explosion-proof Optic Monitor, Status Lights, Bypass Switch and Ground Verification

<b>CALL</b>	TECHNICAL SUPPORT	(800) 5-CIVAICON • (800) 524-8226
	INQUIRIES SALES SERVICE	(888) 526-5657 • fax (888) 634-1433

**civaicon**<sup>TM</sup>

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816-741-6600 • fax 816-741-1061  
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**ISO 9001**  
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**USA**

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# CIVACON 8100 SERIES OPTIC RACK MONITORS

## OPERATION

Civacon optic rack monitors are used with up to eight compatible optic liquid level sensors or onboard monitors to monitor the status of liquid within transports (compartments) or other storage tanks. Overfill detection systems, such as the 8100 series optic rack monitors, provide automatic warning of product overflow at predetermined levels and warn of pending overflow conditions.

The 8100 series, optic rack monitors use the standard optic signal format within the industry to communicate with an onboard control monitor or straight optic system on transports.

A unique, pulsed — and intrinsically safe — electrical signal is generated by the control monitor and is transmitted to the sensors via a coiled cord and optic format plug.

When sensors on the transport are dry a signal is returned to the monitor. If the signal meets predetermined characteristics the monitor goes to a “permissive” state. This “permissive” state closes a set of relay contacts which, in turn, changes the status light on the front of the 8100 series optic rack monitor from red (“non-permissive”) to green (“permissive”) signaling the terminal automation system (T.A.S.).

If the sensor becomes wetted during the loading process, the monitor senses this condition and opens the relay. When the relay is opened, the status light will change to red (“non-permissive”) and stops the “permissive” signal that was being sent to the terminal automation system (T.A.S.).

Specific to the model 8160, overfill detection and ground verification are signaled to the pump control system separately.

## SPECIFICATIONS

**Operating Temperature:**

-40°F to 158°F (-40°C to 70°F)

**Input Requirements:**

120VAC 60 Hz, 10 VA (Standard)

240VAC version available — please inquire

**Output Relay Contacts:**

240VAC — 5A DPDT

**Response Time:**

0.5 seconds maximum, dry to wet transition

**Electrical Connections:**

Internal terminal strips

**Enclosures:**

NEMA 7 explosion proof

**Housing Material:**

Aluminum

**Approximate Weight:**

8100 — 30 lbs.

8120 — 31 lbs

8140 — 32 lbs.

8160 — 32 lbs.

**Approvals:**

Factory Mutual, CSA

**Installation Information:**

Provided with the monitor. If necessary, installation instructions can be ordered separately at no charge.

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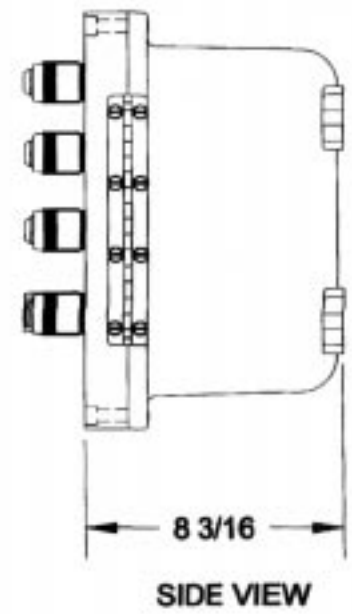
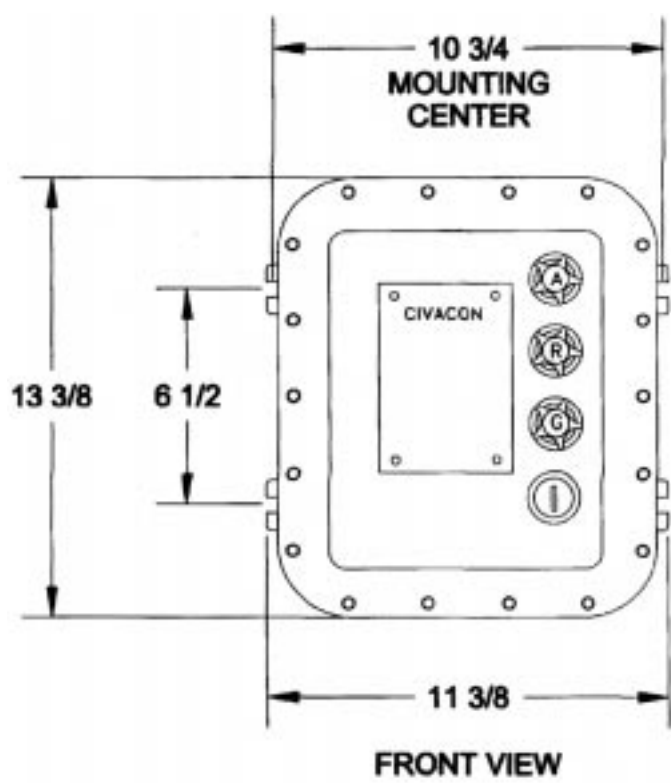
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# DIMENSIONAL DRAWING

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