

# AUTOMATIC SWITCHING, OPTI-THERM RACK MONITOR

## OPTI-THERM RACK MONITOR MODEL 8460



Civacon Opti-Therm 8460  
Features:

- Automatic switching operation, no thinking or manual efforts required by your customers
- Optic and Thermistor technology in one package, eliminating your customer's concerns about which system technology they use on their transports
- Compatible with all 5-wire optic, thermistor, thermo-optic sensors. Will load all trailers equipped with any brand or style of overfill detection system
- Includes ground verification via a separate relay contact
- Overfill detection and ground verification are signaled to the terminal automation system (T.A.S.) separately, enabling maximum flexibility at the loading terminal without compromising safety

**CALL TODAY...**

*Call Civacon today and make the "AUTOMATIC SWITCH"  
to the model 8460, Opti-Therm Rack Monitor...  
the only system you'll ever need at your terminal.*

<b>CALL</b>	TECHNICAL SUPPORT	(800) 5-CIVACON • (800) 524-8226
	INQUIRIES SALES SERVICE	4304 Mattox Road • Kansas City, MO 64150 (888) 526-5657 • fax (888) 634-1433

**civacon**<sup>TM</sup>  
CARGO TANK PRODUCTS GROUP

# CIVACON 8400 SERIES

## OPTI-THERM RACK MONITOR

### OPERATION

Civacon Opti-Therm rack monitors are used to automatically recognize the type of overflow system (optic or thermistor signal technology) that is being used on a transport. When connected to the transport, the monitor checks the status of sensors within tanks or compartments. Overflow detection systems such as the 8460 provide automatic warning of product overflow detection at predetermined levels and warn of a pending overflow condition.

Rack monitors using standard optic and thermistor signal formats communicate with the onboard monitor (overflow detection chassis) or directly to the "straight" optic or thermistor systems on the transport.

This communication is accomplished via a pulsed, intrinsically safe electrical signal. The electrical signal is generated by the control monitor and is transmitted to the sensors through a coiled cord and industry standard plug.

During normal operation, when the sensors on the trailer are dry and functioning properly, a signal is returned to the monitor. Providing this signal meets predetermined characteristics, the monitor goes to a "permissive" state. This "permissive" state closes a set of relay contacts which changes the status lights on the front of the rack monitor (model number 8460) from red to green and signals to the terminal automation system (T.A.S.) that everything is functioning properly.

During the loading process, if a sensor becomes wetted, the monitor opens a relay enabling the terminal automation system (T.A.S.) to recognize the changed condition. Immediately, the status lights on the rack monitor (model number 8460) switches to red, a "non-permissive" state.

This system can be used for applications that include as many as eight optic or thermistor liquid-level type sensors.

### SPECIFICATIONS

**Operating Temperature:**  
-40°F to 158°F (-40°C to 70°C)

**Input Requirements:**  
120 VAC 60 Hz, 15VA (Standard)  
120 VAC available — please inquire

**Output Relay Contacts:**  
240 VAC — 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:**  
8400 — 30 lbs.      8420 — 31 lbs.  
8440 — 32 lbs.      8460 — 32 lbs.

**Approvals:**  
Factory Mutual, CSA

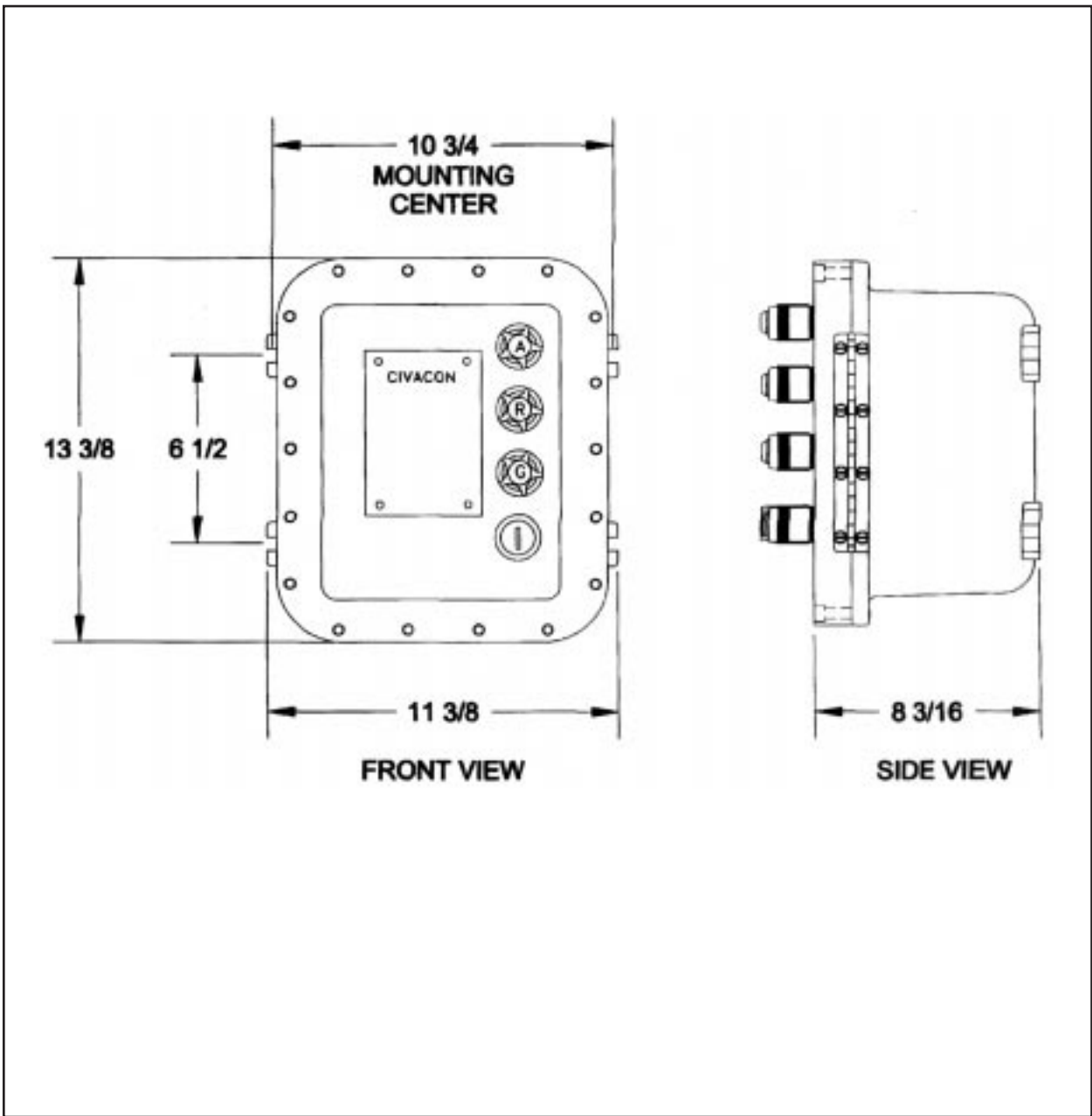
**Installation Information:**  
Provided with the monitor. If necessary, installation instructions can be ordered separately at no charge.



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# DIMENSIONAL DRAWING

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