

# 3300RM<sub>2</sub> / 3304RM<sub>2</sub> / 3300RM<sub>2</sub>-NO<sub>2</sub> REFRIGERANT MONITORS

## Quick Install Guide



Caution - risk of electric shock



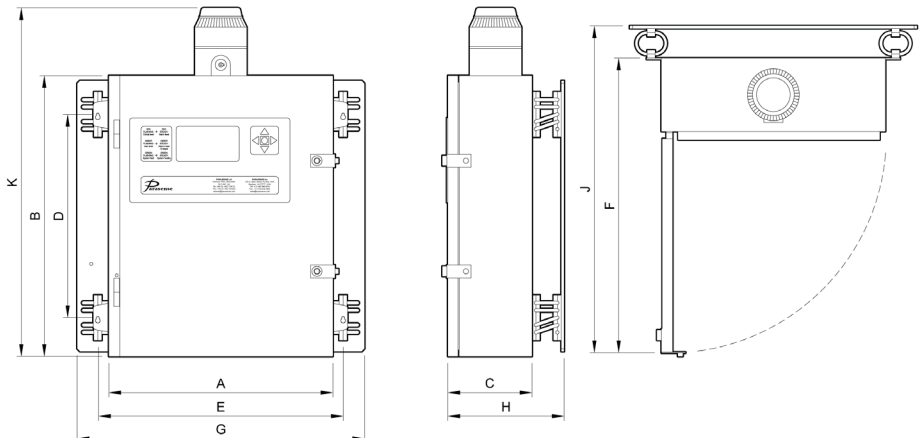
Please read this guide before installing the equipment

**Important:** All installation and maintenance work must be by suitably qualified personnel only. All wiring must be carried out in accordance with latest NEC, CEC or IEC requirements and local regulations

To reduce the risk during installation and maintenance, personnel should wear protective shoes and gloves. Where applicable it may be necessary to transport monitors into position with the aid of a trolley. Signage may be used to warn of potential for electric shock

Doc Ref. QS3300RM2 Rev3 20th March 2020

Revision	Details	Checked
2-0: 5th Jan '18	Updated in line with UL61010 approval	JB
2-1: 4th Apr '18	Branding updated	JB
Rev3	Address change	MC



All models	A	B	C	D	E	F	G	H	J	K	WEIGHT (exc. shock kit)
Metric (mm)	400	500	150	360	434	550	510	208	758	620	16.2kg
Imperial (In)	15.7	19.7	5.9	14.2	17.1	21.7	20.1	8.2	29.9	24.4	35.6lb

(note: Parasense beacon/sounders are approximately 120mm high x 95mm diameter (4.7" x 3.74") )  
(Shock kit finished weight: 6.3kg/14lb)

## Installation Guide

1. Mount the monitor or optional shock plate to a solid vertical service or structure capable of supporting the stated weight. We recommend the surface be built from concrete blocks, bricks or a suitable metal bulkhead or structure. It must be positioned where the door can be fully opened and in a location that facilitates easy service and maintenance.
2. It should be mounted using the fixed brackets as shown in the above drawing, with hole centre dimensions 'D' and 'E'. If the optional shock plate is used, the monitor should be located on the four mounting pins of the shock isolators and secured in place using the fixings provided with the mounting kit
3. Fixings should be 4mm (1/8") or 5mm (3/16") screws or bolts minimum 40mm (1.5") long with plain washers and suitable wall plugs.
4. Sufficient space must be allowed underneath the monitor for installation of the sampling pipes, power and communications cables. For sampling pipe installation guidelines see separate drawing.

## Electrical Requirements

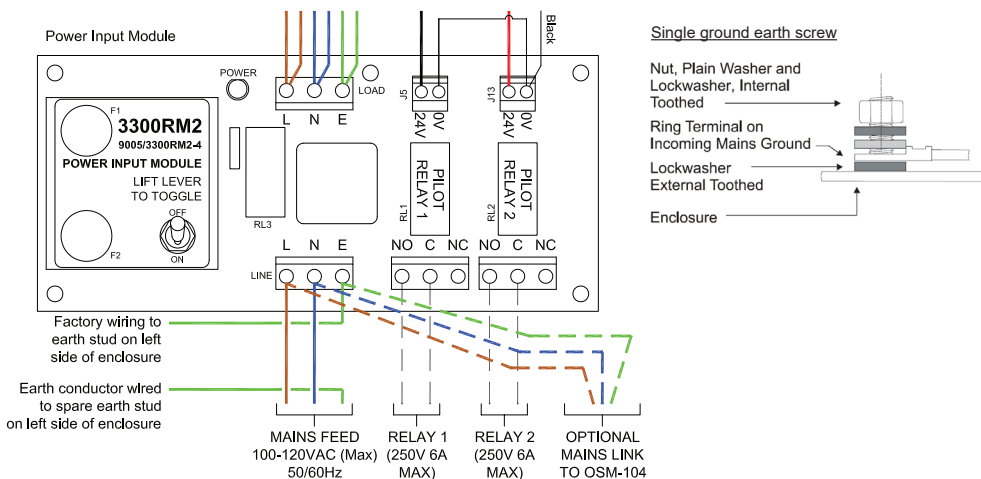
The 3300RM2 requires an earthed, single phase mains supply in the range 100-120V AC, 260VA, 50/60Hz protected by a 2 pole 5 amp switch or circuit breaker. Model no. 3300RM2-NO2 includes the optional OSM (oxygen sensor module). The OSM can have its mains power taken from the 3300RM2 input terminals; in this case the mains supply for the 3300RM2 should be protected by a 2 pole 10amp switch or circuit breaker. The OSM can alternatively have its own dedicated supply. See 3300RM2-NO2 and OSM manual for full details.

The disconnect device must be suitably located, easily reached and marked as the disconnecting device for the equipment with the off position clearly marked. It must disconnect all current carrying conductors and meet requirements of IEC60947-1 and IEC60947-3.

The 3300RM2 is protected by 2 x 2.5A anti-surge fuses on the power input module. **Note: these fuses must be changed by suitably qualified personnel only.** All cabling should be suitably protected in either conduit or wire-way.

**All mains wiring connections should be readily inspected after the equipment is installed prior to power-up**

The final connection should be made as indicated, incorporating a water tight strain relief bush with a smoothly rounded opening, through the detector enclosure.



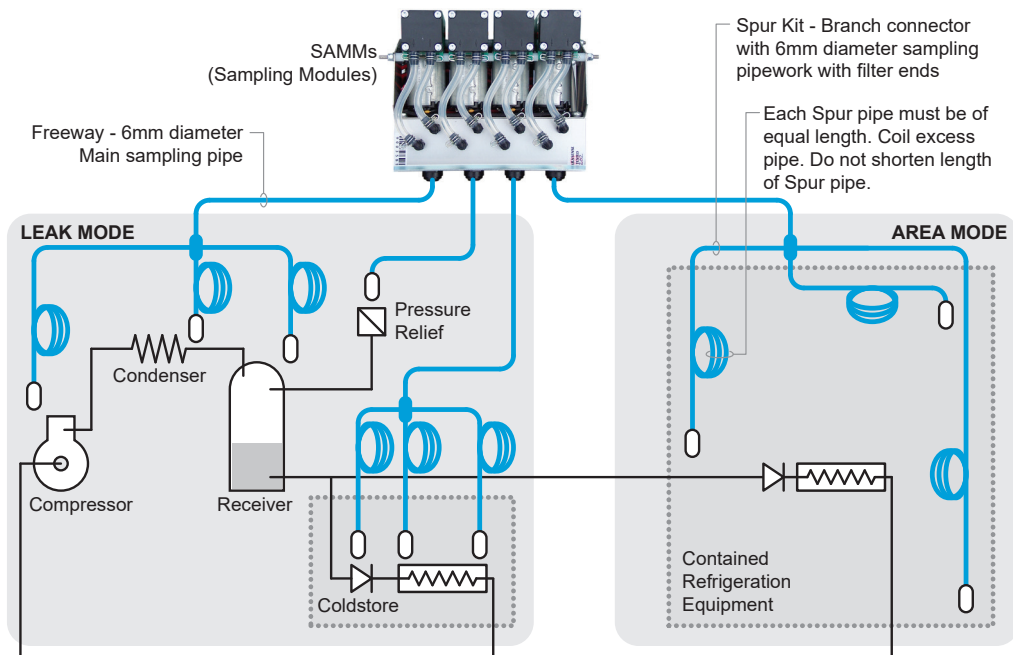
## Sampling Pipework Installation Guidelines

### Installation - Do

- Maximum of one spur kit per SAMM.
- Maximum of 4 way split.
- Spur Kit Freeway pipe is always to be of equal length. No exceptions.
- Ensure that the Freeway is pushed fully into the connectors on the SAMM and spur kit branch connectors.
- Support and clip all Freeway and spur kit branch connectors.
- Ensure that the spur kit Freeway filters always point downwards.
- Attach identity markers to both ends of the Freeway, including A (area) or L (leak) prefix.
- Use continuous lengths of Freeway (DO NOT JOIN).
- Sample points from a single SAMM must all be in the same room.
- Leak mode sample points to be located as close as possible to the potential leakage point.
- Area mode sample points to be located in general airflow of space at heights of between 1.5m/5ft and 2.4m/8ft, preferably away from potential leakage points.
- Cut the Freeway straight using the correct cutter (supplied by Parasense).

### Installation - Do Not

- Exceed 150m/500ft of Freeway (including all spur Freeway; E.g. for an installation with 100m/330ft of Freeway + 4-way 5m/16ft spur kit, the length would be 120m/394ft).
- Flatten or kink the Freeway.
- Bend the Freeway at a radius of less than 150mm/6".
- Run the Freeway from a warm place through a very cold space.
- Expose the Freeway or spur kit to temperatures in excess of 60°C/140°F, or less than -30°C/-22°F.
- Let the spur kit filters ever be immersed in water or any other liquids.
- Mix spur kit Freeway of different lengths on the same SAMM.
- Run Freeway in areas where they may be stood on or where they may restrict access to other equipment.



Typical installation incorporating spur kit

Factory Default Configuration Settings

Monitors are supplied programmed with Default Configuration Data. Modification can only be carried out via the Management menu of the door-mounted display.

Network settings	SAMM Settings	
IP Address: 192.168.0.50	Alert Level: 50ppm	Pipe Length: 100ft
Netmask: 255.255.255.0	Alarm Level: 300ppm	Refrigerant: R134A
Server: 192.168.0.1	Critical Level: 850ppm	
Gateway: 192.168.0.1		
	Daylight Savings	
Relay Settings	DST: Enabled	
Relay 1 - 8: Any Critical	DST Begins: 2nd Sunday in March	
9: Any Alert	DST Ends: 1st Sunday in November	
10: Any Alarm		
11: Any Critical		
12: Any Fault	General Settings	
13-16: Any Critical	Units: Imperial	
	Sample Interval: 5 Minutes	

SAMM Name/State
SAMM 1: Enabled, Leak Mode
thru to
SAMM 8: Enabled, Leak Mode

Relay Functions

16 separate volt-free configurable changeover relays are fitted to the network module, rated at 16A (resistive). Contact voltages should not exceed 24V DC.

Two pilot relays are also provided on the power input module, rated at 6A (resistive). Voltages should not exceed 250V AC from the site mains. These are factory wired to activate using relays 1 & 2 on the network module in conjunction with the 24V DC auxiliary supply.

Relays on the network module become energised when the monitor is powered up, pilot relays are energised when 24V DC is applied across the 24V and 0V terminals. i.e. C and NO are linked, C and NC are open circuit. On loss of power or an alarm situation occurs, the relays become de-energised, i.e. C and NC are linked, C and NO are open circuit.

The relays are configured via the door mounted display. Refer to the 3300RM2 O&M manual for full details

Please also refer to the user manuals for full installation details  
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