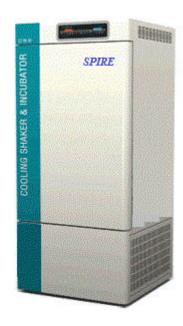
## REFRIGERATED ORBITAL INCUBATOR SHAKER

Our company manufactures and supplies Orbital Shakers Incubators catering to customers' varied requirements. These Orbital Shakers are made of world class raw material and tested under the guidance of specialists.



### SAILENT FEATURES

- □ Double walled construction with inner chamber made of stainless steel 304 and outer chamber made of mild steel duly powder coated
- Solid door with full view inner plexi-glass door or see through double walled door with glass window enables inspection and monitoring of inner chamber specimens without disturbing the process temperature.
- ☐ Shaking platform made of SS 304
- □ PUF thick insulation to ensure temperature stability & reduced energy consumption
- ☐ Keyed door lock for improved security with magnetic door gasket.
- ☐ Designed air flow system ensuring uniform temperature distribution
- Micro processor based PID temperature indicator cum control with LED display
- □ PT-100 temperature sensor having sensitivity 0.1°C
- ☐ Heating done by long lasting SS air heater
- ☐ The cooling is done by a hermetically sealed CFC FREE eco friendly compressor coupled with evaporator and condenser unit
- ☐ Shaking with the help of DC Drive & Brush less motor having Eccentric pulley mechanism
- □ 50-220RPM shaking speed range
- □ Shaker speed can be controlled through a continuously speed variable regulator knob
- ☐ Shaking accuracy of ± 2RPM
- □ 25 mm orbital action
- ☐ SS / Fiber clamps having spring tension for holding flask
- ☐ Continuous running operation of shaker
- ☐ Independent digital displays for shaking speed (RPM) and temp
- □ SS rod mesh or perforated shelf for sample incubation
- ☐ Fluorescent lamp illumination for clear view of work chamber
- □ Over temp cut off using safety thermostat
- ☐ Validation port provided
- ☐ Automatic restart at pre set speed and temp in case of power interruption
- ☐ It works on 230V AC single phase power supply

#### SPECIFICATION

Description	SAII-OIS-9C	SAII-OIS-16C	SAII-OIS-25C	SAII-OIS-49C			
Maximum Load Kgs	20	30	50	100			
Shaking Plate Size	12" x 12"	18" x 18"	24" x 24"	30" x 30"			
<b>Speed Range</b>	50 – 220 RPM						

# Spire Automation & Innovation, India.

Inspiring Generations...

Corporate Office: S.No 71,B-28,Rajsagar,Kirti Nagar,New Sangvi,Pune,Maharashtra,India-411061 Tel: +91-9975777088 / +91-9422771136 Email ID: sagar@spireautomation.com /nisarg@spireautomation.com Web: www.spireautomation.com



# Spire Automation & Innovation, India

Inspiring Generations...

Temp Range	+4°C to 70°C							
Temp Accuracy	± 1°C							
Temp Uniformity	± 0	.5°C	± 1°C					
Max humidity	80%							
Shaking Amplitude	25 mm							
Flask Capacity	250ml x 9 flask / 1000 ml x 4 flask	250ml x 16 flask / 1000 ml x 9 flask	250ml x 25 flask / 1000 ml x 16 flask	250ml x 49 flask / 1000 ml x 25 flask				
Chamber volume	100 L	190 L	310 L	455 L				
Internal Size W x D x H	16" x 16" x 24"	22" x 22" x 24"	28" x 28" x 24"	34" x 34" x 24"				
External Size W x D x H	20" x 24" x 46"	26" x 30" x 46"	32" x 36" x 46"	38" x 42" x 46"				
Weight	140	175	200	280				

## User can select any one capacity platform as per his / her requirement for shaking platform

Model / Flask capacity (ml)	150 ml	250 ml	500 ml	1000 ml	2000 ml	3000 ml	5000 ml
SAII-OIS-9C	9	9	4	4	1	1	1
SAII-OIS-16C	25	16	16	9	4	4	2
SAII-OIS-25C	36	25	25	16	9	4	4
SAII-OIS-49C	64	49	36	25	16	9	9

### **OPTIONAL (Additional Feature):**

- 7 days circular chart paper temperature recorder
- Heavy duty motor with shaking speed 50 to 260 RPM
- Heavy duty shaker motor operated using variable frequency drive having shaking speed 15 to 300 RPM (Above 300 RPM machine available in horizontal model)
- Orbital shaking amplitude 40 mm or 50 mm
- PLC controlled equipment having touch screen colour display HMI with data logging facility of temp and RPM parameter
- MOC Outer body SS 304 & MOC inner body SS 316
- Interlocking of door and shaker Shaking stops automatically as door is opened and resumes operation as door is closed
- Validation IQ, PQ & OQ documents
- Audio visual temp deviation alarm
- Power failure alarm
- Audio visual door open alarm
- Digital timer for setting shaking time
- Inbuilt voltage stabilizer for high voltage protection
- Extra clamps of  $150 \, \text{ml} / 250 \, \text{ml} / 500 \, \text{ml} / 1000 \, \text{ml} / 2000 \, \text{ml} / 3000 \, \text{ml} / 5000 \, \text{ml}$

NOTE - Shaking speed accuracy is dependent on input line voltage fluctuation

# Spire Automation & Innovation, India.

Inspiring Generations... Corporate Office: S.No 71,8-28,Rajsagar,Kirti Nagar,New Sangvi,Pune,Maharashtra,India-411061 Tel: +91-9975777088 / +91-9422771136

Email ID: sagar@spireautomation.com /nisarg@spireautomation.com Web: www.spireautomation.com







