

Chamber Specifications continued

Thermo Scientific Cat. No.	3962
Description	821 L Incubated Environmental Chamber
Voltage	200-230V, 50/60 Hz
Temperature	
Control	±0.1°C
Range	5°C above ambient to 60°C (140°F)
Uniformity	±0.4°C @ 30°C (86°F) / ±0.3°C @ 37°C (98.6°F) / ±0.5°C @ 45°C (113°F)
Low Alarm	User programmable and indicator
Over-temperature	
Sensor	Precision thermistor
Setability	0.1°C
Function	User programmable, action (shuts off heat), and indicator
Temperature Safety (Cabinet)	
Sensor	Independent thermostat
Type	Independent analog electronic
Fittings	
Access Port With Stopper	6.1 cm (2.4 in.) I.D., one on each side
Unit Heat Load	
115V/230V	150W (510 BTU / hour); 129 kcal per hour
Shelves	
Dimensions	77.7cm x 65.5cm F-B (30.6 in. W x 25.8 in.)
Construction	2B finish, solid stainless steel
Surface Area	0.5 sq. m (5.4 sq. ft.) per shelf
Max. per Chamber	13.0 sq. m (140.4 sq. ft.)
Standard/Maximum No. of Shelves	5, 26
Loading	13.6 kg (30 lbs.) per shelf, fully inserted and stationary; not to exceed 136.0 kg (300 lbs.) total per cabinet
Construction	
Interior Volume	821.2 liters (29 cu. ft.)
Interior Material	Type 304, 2B finish, stainless steel
Exterior Material	Cold-rolled steel, powder coated
Insulation	5.1cm (2.0 in.) fiberglass
Exterior Door	Heated, triple pane, tempered glass
Outer Door Gasket	Molded vinyl
Electrical	
	200/230V, 50/60 Hz, 5.0 Amps (Operating range 180-250V includes voltage fluctuations)
Circuit Breaker/Power Switch	8 Amps; 2 pole
Exterior Convenience Receptacle	75 Watts maximum (matches cabinet voltage)
Interior Convenience Receptacle	230 Watts maximum (matches cabinet voltage)
Plug	Plug 230V: CEE 7/7 Plug 
Alarm Contacts	Temperature deviation and power failure; Common, NO, and NC; customer connections through RJ11 jack on rear of unit
Data Outputs (opt.)	RS-485, 0-1V, 0-5V, 4-20 milliamp
Dimensions	
Exterior	96.5cm x 203.2cm x 83.8cm F-B (38.0 in. W x 80.0 in.H x 33.0 in.)
Interior	78.7cm x 152.4cm x 68.6cm F-B (31.0 in. W x 60.0 in.H x 27.0 in.)
Weight	
Net	226.8 kg (500 lbs.)
Shipping (motor)	299.4 kg (660 lbs.)
Certification	CE

Specifications are based on nominal voltages of 230V in ambients of 22°C to 25°C.
Performance is plus or minus the least significant digit unless otherwise specified.

Accessories (All are customer installed unless indicated otherwise)

Thermo Scientific Cat. No	Description
Shelving	
Stainless Steel Shelves for 3948, 3907, and 3962	
224139	Solid Stainless Steel Shelf and Channels for 3948, 3907 and 3962
224155	Perforated Stainless Steel Shelf and Channels for 3948, 3907 and 3962
224161	Reinforced Stainless Steel Shelf and Channels for 3948, 3907, and 3962; two per unit max., not for shakers; 68.0 kg load maximum with shelf fully inserted and stationary
Shaker Support System, factory installed	
1900005*	Two shelf shaker support system without duplex outlet, each shelf will hold 90 kg. for 3948 and 3962. Must be ordered with duplex outlet (505099 or 505094)
190761*	Three shelf shaker support system includes duplex outlet, each shelf will hold 90 kg for 3948 and 3962
Door Options, factory installed	
190239	Lexan® Inner Door Kit (five doors) for 3948 and 3962; factory installed
190514	Door Lock Assembly for 3948 and 3962; factory installed
190597	Left-Hand Door Swing Kit for 3948; factory installed
Stainless Steel Door Glass Covers	
190591	For 3948 and 3962; factory installed
190892	For 3948 and 3962**
Reinforced Floor Options	
500182***	Reinforced Floor with Removable Ramp for 3948 and 3962; accommodates a cell roller
190777***	Same as No. 500182 but factory installed
Access Ports, factory installed	
505101	Port for 3948 and 3907; 38mm I.D.; on center right wall
193004	51 mm nominal ID port with cover
190164	Port for 3962, 61 mm I.D., customer specified location
193005	102 mm nominal ID port with cover
193006	152 mm nominal ID port with cover
Convenience Receptacles, factory installed	
505094	230V (includes separate line cord) for 3948 and 3907; located on center rear wall
Data Outputs (select one) for 3962, factory installed	
190523	RS-485 interface (compatible with 1535 Monitor/Alarm only)
190512	4-20 milliamp
190543	0-5V
190544	0-1V
Sensaphone Telephone Dialing Systems, interface with standard touch-tone phone	
400047	For up to four input channels
400134	For up to eight input channels

Warranty

We confidently back our environmental chambers with a standard limited two-year parts and labor warranty.

*Rubber isolators replace casters for maximum stability.

**Must be installed by qualified personnel.

***Ramp extends approximately 584mm (23") in front of the chamber.

****Specification sheets for protocol and field validations are available for review upon request.

Thermo Scientific Cat. No	Description
Chart Recorders and Paper	
6 in., 7 Day Chart Recorders for 3948 and 3907; 0°C to 60°C (32°F to 140°F)	
201144	Single Pen, factory installed
201145	Single Pen, onsite installation
201146	Dual Pen, factory installed
201147	Dual Pen, onsite installation
6 in., 7 Day Chart Recorders for 3962, 0°C to 60°C (32°F to 140°F)	
201156	Single Pen, 230V, 50/60 Hz
6 in. Chart Paper for Recorders, 50 per box	
180006	For Single Pen, 0°C to 60°C (32°F to 140°F)
197030	For Single Pen, -10°C to 70°C (14°F to 158°F)
197075	For Single or Dual Pen, 0°C to 100°C (32°F to 212°F)
RH System Options	
1900391	Condensate Evaporator for 3948 and 3907; includes separate line cord; 240V
1900139	Heatless Dryer Kit for 3948 and 3907, for sub-ambient chamber RH, factory installed; The heatless dryer requires an air supply of 6.2 bar (90 PSI) at 17 m3/h (10 CFM) compressor, at minimum. It is recommended that the air supply be greater than the minimum required by the dryer.
Deionization Cartridge Assembly for chambers with humidity and no DI water source	
019-168-00	DI cartridge assembly includes DI cartridge, wall bracket, pressure regulator and gauge and 1/4" flexible tubing
585-036-00	Replacement DI cartridge
Calibration Certificate and Temperature Mapping with Report	
260045	Temperature Mapping Report (factory installed)
260049	Calibration Certificate (specify test parameters)
cGxP Protocols and on site Validation Services****	
GLP Level Protocols (IQ OQ)	
IQQDOCE89003499	For 3962
IQQDOCE89003710	For 3948, 3907
GMP Level Protocols (IQ OQ PQ)	
IOPQDOCE89003499	For 3962
IOPQDOCE89003710	For 3948, 3907
GLP Level Field Validation (IQ OQ) Performed at the customer site (protocol included at no extra charge)	
IQQPCKE89003499	For 3962
IQQPCKE89003710	For 3948, 3907
GMP Level Field Validation (IQ OQ PQ) Performed at the customer site (protocol included at no extra charge)	
IOPQPCKE89003499	For 3962
IOPQPCKE89003710	For 3948, 3907
Miscellaneous Accessories	
Infrared CO₂ Control Packages, factory installed	
1900227	For 3948 and 3907
Cell Roll System	
4868	Three-Tier Cell Roller Base (15 positions), 230V, 50/60 Hz, 757mm W x 706mm H x 620mm F-B (29.8" x 27.8" x 24.4")
190049	Add-On Tier (5 positions), 29.8"W x 7.1"H x 24.4"F-B (75.7cm x 18.0cm x 62.0cm), customer installed
190777	Reinforced Floor with Removable Ramp, ramp extends 23.0" (58.4cm), factory installed
500182	Same as No. 190777 but customer installed
228077	Rotation Alarm System, includes annunciator jack, factory installed
228078	Battery Back-Up, provides 24 hours of power if a power failure occurs, factory installed
475560	110mm x 285mm Glass Bottles (4 per case)