VWR® 190 L Compact CO₂/ NonCO₂ Incubator Shakers with Magnetic Drive

VWR® 190 L COMPACT CO_2/NONCO_2 INCUBATOR SHAKERS WITH MAGNETIC DRIVE

The CO_2 Incubator Shaker features Temperature, Shaking, CO_2 Concentration, and Humidity controls. Its stackable design helps maximize floor space, with the capability to stack up to three units high.

PRODUCT FEATURES

– 7" High-Res Color Touch Screen with intuitive graphic interface
– Innovative chamber design features smooth rounded internal corners for easy cleaning
– Infra-Red(IR) CO_2 sensor for precise and reliable CO_2 detection
– Optional WiFi and RS485 control
– UV lights for easy sterilization
– Audible and visual alarms
– Mirror finish, pharmaceutical grade stainless steel chamber
– Stackable design up to 3 units
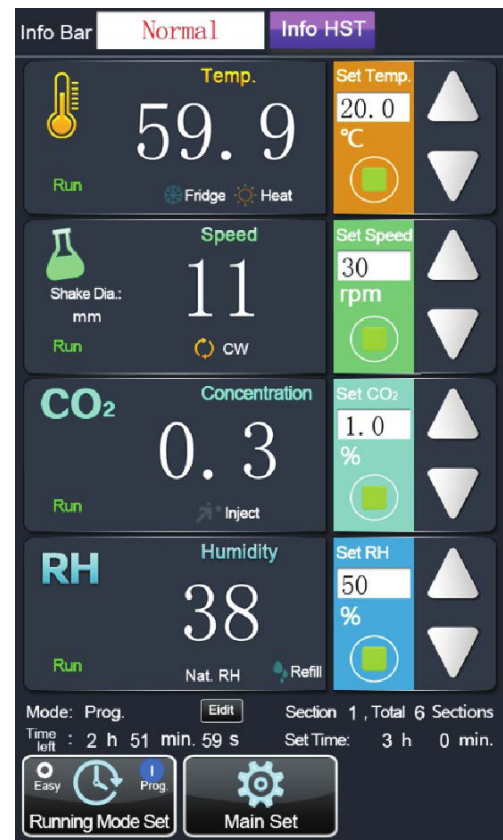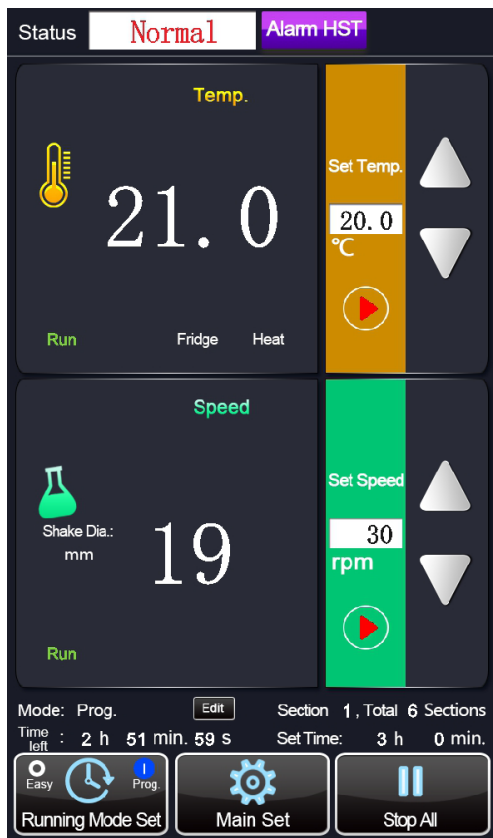– 25 mm and 50 mm orbit models available

INNOVATIVE DESIGN

– Three axis eccentric balance system provides stable and reliable shaking
– Terminal feedback system ensures precise shaking speed
– Sealed Magnetic Drive is highly efficient, quiet, durable, and produces negligible heat that does not affect the chamber temperature
– Combination of Proportional-Integral-Derivative control and Fuzzy control for temperature ensure temperature accuracy within ±0.1 °C
– Program mode allows user to set up to 12 segments of varying temperature and speed
– Highly efficient inverter compressor refrigeration allows for temperatures as low as 18 °C below room temperature with low energy consumption (minimum temperature of 4 °C)
– Infrared CO_2 sensor provides accurate and reliable CO_2 detection (CO_2 Incubator Shakers only)
– Intuitive 7" capacitive touchscreen makes many functions, such as setting alarm parameters, easy to complete
– Slide rail platform makes it easy to load and unload fixtures
– Noise reduction design keeps the instrument noise level to 55 dB
– Wi-Fi monitoring optional accessory allows the user to stay in touch with the instrument even outside of the lab

MAIN INTERFACE:

1. Displays the current instrument status.
2. Light button: Press to turn the light on or off.
3. Displays the current function's running status, orbit diameter (for speed), and any alarms.
4. Plus and Minus buttons: Adjusts the corresponding function's value.
5. Displays the set value and allows user to manually input the set value.
6. Run/Stop button: Runs and stops function.
7. Edit button for programmable mode: Sets up to 12 running segments of varying temperatures and speed.
8. Running mode button: Switches between "Easy" and "Program Control" mode.
9. Run/Stop all button: Runs and stops all functions.
10. Main Settings button: Enters settings page (image below), which features specific settings for the user to edit.
11. Function icon buttons: Graphically displays the real-time function data.
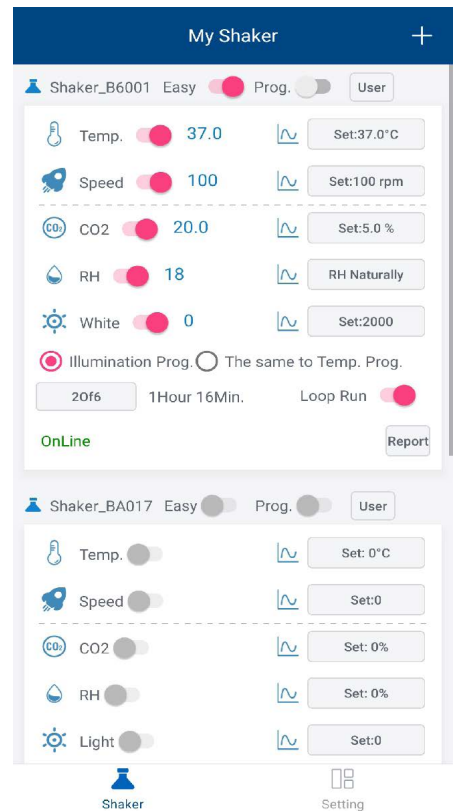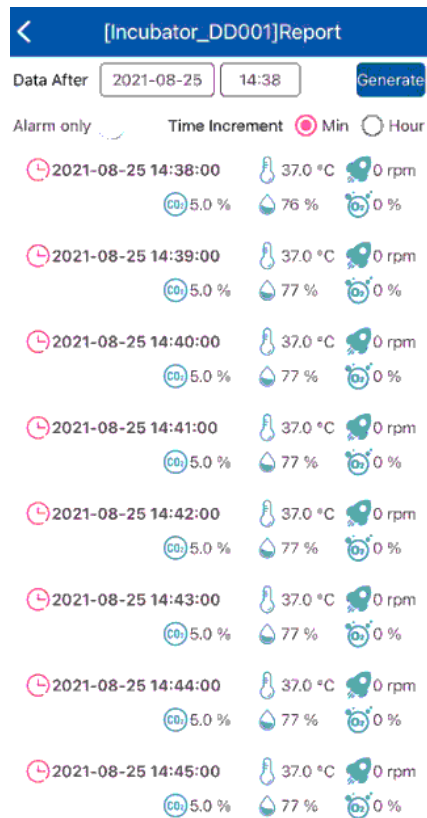
CONTROL FEATURES

- Powerful Data storage: Data is stored for more than 2 years. Recorded in 1 minute intervals.
- Real-time data view: On the display, operator can view the running data from latest 7 days.
- Data export: Easily export more than 2 years of parameter data via USB.
- Remote WiFi monitoring accessory and smart phone app enable remote monitoring and control.
- Various Alarms: Alarms can be armed to activate when parameter values deviate outside of users' set bounds.
- Alarm recording: Alarm information is stored and viewable.
- Easy Calibration: Calibrating functions only require inputting the difference between set and actual values.
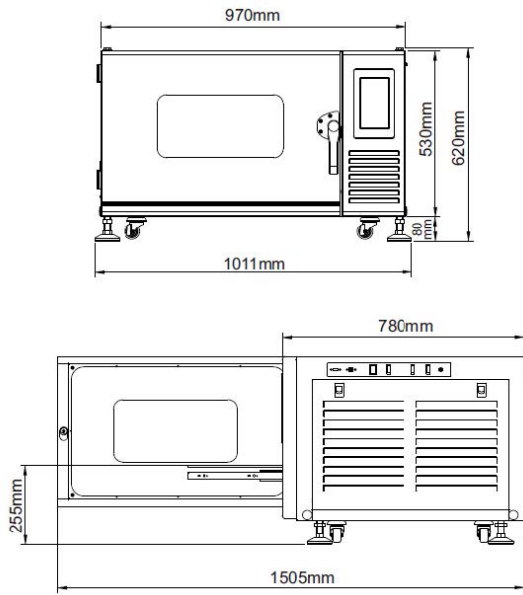
WIFI REMOTE MONITOR KIT

The remote monitoring and control accessory and app gives customers the ability to control their Incubator right from their phone or tablet via Wifi Connection. Features of the incubator app include the ability to set and change the incubator's parameters (including temperature and CO_2 concentration). Text notification are sent when an alarm is activated. This unique app makes it possible to stay conveniently connected with VWR CO_2/NonCO_2 Incubator Shakers and ongoing projects, whether you are in the lab or not.
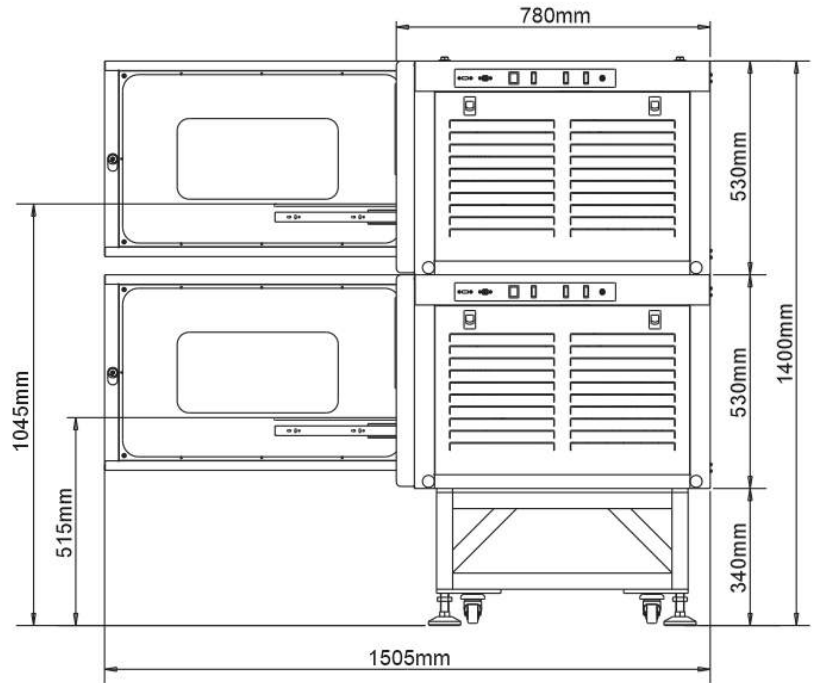
OVERVIEW

- **High Resolution 7"-inch Color Touch Screen:** Modular display presents instrument status and function values in a clear and concise manner.
- **Capacitive Touch Screen:** The capacitive screen is more responsive and durable than a resistance screen as there is no reaction delay when the screen is pressed.
- **Screen Lock:** The display screen has an automatic lock screen with password protection function. This prevents any accidental or unauthorized alterations of the programmed operations or settings.
- **Pull Out Rail Platform:** Operators can easily pull the platform out to load or unload fixtures. Only one locking handle in the middle of the platform makes the process fast and convenient.
- **Excellent Temperature Control Performance:** When the incubator is at a stable temperature of 37 °C, the uniformity is ±0.3 °C.
- **Strong Cooling Capacity:** The incubator chamber can be cooled to 18 °C below the ambient temperature (Lowest temp is 4 °C).

- **Inverter Compressor:** Makes cooling a noiseless, durable, and highly efficient process while also saving energy.
- **Three Units Can Be Stacked:** This product can be purchased as a single, double, or triple stack.
- **Bi-Directional Ultraviolet Sterilization:** The chamber is equipped with a UV sterilization light component to enhance the germicidal irradiation effect and reach all areas of the chamber.
- **Ultra Quiet Design:** The noise level is less than 55 dB when incubator is running and cooling (loudest process), providing a quiet environment for the operator.
- **Slow Acceleration and Deceleration:** Shaking function starts and stops slowly to prevent large shear forces on the bacteria or cells. High Pressure Water Rinse: Both the platform and chamber feature an integrated draining system that is fast and efficient.
- **Efficient and Durable Insulation:** Foamed Polyurethane insulation provides advanced thermal insulation. The material is also air-tight, waterproof, lightweight, shockproof, electrically insulated, heat resistant, cold resistant, and solvent resistant.
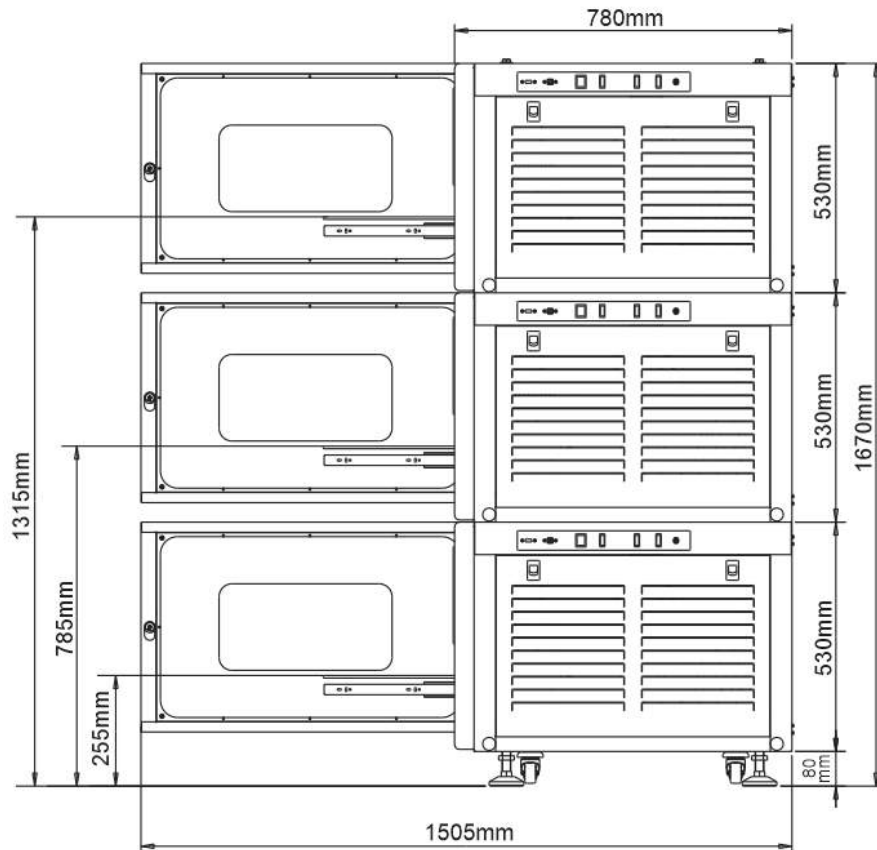
SINGLE UNIT DIMENSIONS

DOUBLE STACK DIMENSIONS WITH 76628-582 STAND

TRIPLE STACK DIMENSIONS

PRODUCT SPECIFICATIONS

Model	76628-598 / 76628-596 / 76628-600	76628-562 / 76628-560 / 76628-564	76628-592 / 76628-590 / 76628-594	76628-556 / 76628-554 / 76628-558
Product Name	VWR® 190 L Compact Magnetic Drive Incubator Shaker		VWR® 190 L Compact Magnetic Drive CO₂ Incubator Shaker	
Platform Dimensions WxD	550 x 470 mm (21.65 x 18.50 in)			
Max Capacity	Clamp capacity: 50mlx72 / 100mlx30 / 150mlx30 / 200mlx30 / 250mlx30 / 500mlx16 / 1000mlx12 / 2000mlx6 / 5000ml(Thomson)x4 Sticky Mat: 50mlx72 / 100mlx53 / 150mlx41 / 200mlx32 / 250mlx30 / 500mlx16 / 1000mlx12 / 5000ml(Thomson)x4			
Capacity	190 L			
Max Load	10 kg (22.05 lb)			
Temp. Range	Room Temp. Minus 18 °C~60 °C (Lowest Temp is 4°C)			
Temp Accuracy	±0.1 °C			
Temp. Uniformity	± 0.3 °C (@37 °C)			
Temp Recover Time After Door is Opened for 30s	≤6min (@37 °C)			
Speed	0(stop), 30~ 300 rpm			
Speed Accuracy	±1 rpm			
Speed Drive	Magnetic Drive			
Orbit Diameter	25 mm (1.02 in)	50 mm (2 in)	25 mm (1.02 in)	50 mm (2 in)
CO₂ Sensor	N/A		Infrared	
CO₂ Control Range	N/A		0~20%	
CO₂ Control Accuracy	N/A		±0.1%	
CO2 Recover Time After Door is Opened for 30s	N/A		≤6min (@5%)	
Relative Humidity Type	Active		Active	
Max Humidity	90%		90%	
Programmable Segments	12 Segments			
Timer	0~999h 59min			
Illuminiation	LED Lamps on Left and Right Walls			
Disinfection	UV Lamps on Left and Right Walls			
Door Opening Direction	Leftward			
Internal Dimensions WxDxH	654 x 605 x 474 mm (25.75 x 23.82 x 18.66 in)			
Outside Dimensions WxDxH	970 x 780 x 530(+80 with feet) mm (38.19 x 30.71 x 20.87(+3.15 with feet) in)			
Internal Working Height	300 mm (11.8 in)			
Net Weight	170 kg (375 lb)			
Display	7" Color Capacitive Touch Screen			
Parameter Protection	Password Protected			
Data Stored	Time, Temperature, Speed, Instrument Status		Time, Temperature, Speed, CO2 Concentration, Humidity, Instrument Status	
Data Storage Interval	1 Minute			
Screen Data Display	Displays Most Recent 7 Days of Data			
USB Data Export	Most Recent 912 Days of Data			
Automatic Defrost	Yes			
Noise Level	≤55dB (When Compressor is Running)			
Auto-Recovery after Power Interuption	Yes			
Power when Heating	≤450 W			
Power when Cooling	≤180W			
Power supply	AC 110V±11V, 60Hz			
Power	≤630W		≤630W	
Mobile Monitoring and Control by WiFi	Optional through 76628-570 Accessory and App			
Warranty	2 Years Parts and Service			
Certification	CE, UL, cUL			

*Sticky Mat can be cut to fit platform

**Note: Double Stack units it is recommended that the Shaker Speed of the top unit <250 rpm. Triple Stack units it is recommended that the Shaker Speed of the middle and top unit < 250 rpm.

PRODUCT ACCESSORIES

Tube Rack

Adjustable Tube Rack

Flask Clamps

Mini Universal Spring Platform

96-Well Micro-Plate Holder

Infusion Bottle Clamp

Fixture for Separating Funnel

Sticky Pad

Visor cover

CO_2 Cylinder Pressure Regulator

Stand for VWR Compact Incubator Shakers

Water Carboy

ACCESSORY SPECIFICATIONS

Item Type	Specifications	Max Capacity	Cat. No.v
	Holds 25 ml Flask	72	76628-552
	Holds 50 ml Flask	72	76628-514
	Holds 100/125 ml Flask	30	76628-528
	Holds 150 ml Flask	30	76628-544
	Holds 200 ml Flask	30	76628-550
	Holds 250 ml Flask	30	76628-566
	Holds 500 ml Flask	16	76628-572
	Holds 1000 ml Flask	12	76628-574
	Holds 2000 ml Flask	6	76628-578
Flask Clamp	Holds 5000 ml Thomson Flask	4	76628-500
	Holds 40 Tubes x 14 mm	6	76628-502
	Holds 40 Tubes x 16 mm	6	76628-506
	Holds 40 Tubes x 18 mm	6	76628-522
	Holds 27 Tubes x 22 mm	6	76628-524
Tube Rack	Holds 21 Tubes x 30 mm	6	76628-546
	Holds 40 Tubes x 14 mm	6	76628-516
	Holds 40 Tubes x 16 mm	6	76628-518
	Holds 40 Tubes x 18 mm	6	76628-530
	Holds 27 Tubes x 22 mm	6	76628-532
	Holds 21 Tubes x 30 mm	6	76628-534
Adjustable Tube Rack	Holds 24 Tubes x 30 mm	3	76628-542
CO₂ Gas Regulator	Use 1 for up to 2 units in stack	-	76628-466
	Holds 500 ml Infusion Bottle	21	76628-536
Infusion Bottle Clamp	Holds 1000 ml Infusion Bottle	13	76628-538
Microplate Holder	96-Well Microplate Holder	18	76628-508
Fixture for Separating Funnel	Holds Separating Funnels of ≥500 ml	3	76628-540
	280 × 280 mm	4	76628-504
Sticky Mat	140 x 140 mm	12	76628-548
	165 × 165 × 500 mm	6	76628-512
	550 × 470 × 80 mm	1	76628-586
	350 x 240 x 80 mm	4	76628-526
	450 x 400 x 80 mm	1	76628-520
Spring Frame	428 x 295 x 80 mm	2	76628-510
Water Carboy	For humidity function Holds 15 L 1 can serve up to 3 incubator shakers	1	76628-580
Stand	Adds 340 mm (13.39 in) of height Recommended for use with single and double stacks	1	76628-582
Visor Cover	Blocks ambient light from entering chamber	1	76628-584
Remote Monitoring and Control	Connects each unit to users' phones via a WiFi or wired internet connection and an app available on the Apple Store and Google Play	1	76628-570