



# SYNTHECON

3D Culture Systems for a 3D World

## RCCS-4D



### 4 Station Rotator Base

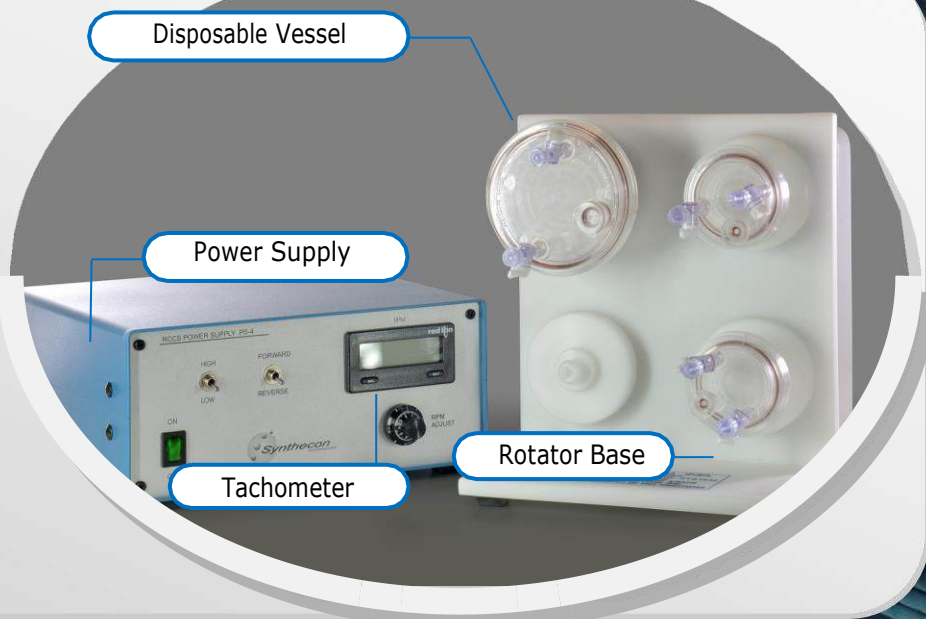
### Power Supply

(with Tachometer and Ribbon Cable)

### Operation Manual

### 4 Disposable Culture Vessels

- Low cost, easy to use system which makes the technology available to most laboratories.
- Each vessel is independently packaged and gamma sterilized. Vessels are supplied 4 to a pack and are available in 10mL and 50mL sizes.



## FAQ

**Q:** How are the cells oxygenated?

**A:** In a gas regulated incubator, gas diffuses through the silicone membrane of the bioreactor.

**Q:** Do the cells stay in one place in the bioreactor?

**A:** No, they continuously fall through the media during vessel rotation. The continuous motion of the cells in media facilitates their exposure to nutrients.

**Q:** Is the RCCS a roller bottle system?

**A:** No. Roller bottles grow cells on the wall of the bottle in 2D. The RCCS grows cells in suspension, either as 3D spheroids or on scaffolds/beads.

## The Synthecon Rotary Cell Culture System

Produces differentiated high density, three dimensional tissue cultures.

Membrane oxygenation provides bubble free operation, which results in an extremely gentle culture.

Operates in standard incubators. Samples may be easily drawn at any time.

Ideal for growing and maintaining normal tissues, cancer tumors spheroids and bacteria/virally infected tissue models.

Synthecon can design and build systems to user's specifications.

# RCCS-4D

## TECHNICAL SPECIFICATIONS-DIMENSIONS RCCS-4D

| COMPONENT    | HEIGHT            | WIDTH            | DEPTH           |
|--------------|-------------------|------------------|-----------------|
| Base         | 9.0" (22.9 cm)    | 8.0" (20.3 cm)   | 8.25" (21.0 cm) |
| Power Supply | 4.5" (11.4 cm)    | 9.5" (24.1 cm)   | 9.5" (24.1 cm)  |
| COMPONENT    | WEIGHT            | ROTATIONAL SPEED | —               |
| Base         | 7.0 lbs (3.3 Kg)  | 7-40 RPM         | —               |
| Power Supply | 6.0 lbs (2.83 Kg) | —                | —               |

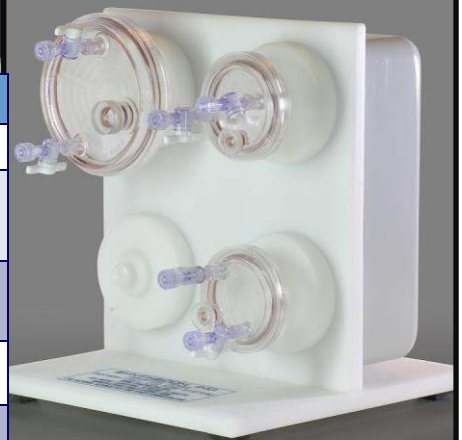
## RCCS-4D POWER AND ENVIRONMENTAL SPECIFICATIONS

| POWER               | VOLTAGE                 | FREQUENCY |
|---------------------|-------------------------|-----------|
| Power Supply Input  | USA 85-260 VAC @ .5Amps | 50-60 Hz  |
| Power Supply Output | 7.5 VDC @ 2.0Amps       | 50-60 Hz  |
| ENVIRONMENT         | TEMPERATURE             | HUMIDITY  |
| Base                | 50-105 °F (10-40 °C)    | 0-100% RH |
| Power Supply        | 50-80 °F ( 10-27 °C)    | 0-75% RH  |

## RCCS-4D COMPATIBLE CULTURE VESSELS

| CULTURE VESSEL MODEL | SIZE   | COMPATIBILITY |
|----------------------|--------|---------------|
| Disposable HARV *    | 10 mL  | Yes           |
| Disposable HARV *    | 50mL   | Yes           |
| Autoclavable HARV    | 1 mL   | No            |
| Autoclavable HARV    | 2 mL   | No            |
| Autoclavable HARV    | 4 mL   | No            |
| Autoclavable HARV    | 10 mL  | No            |
| Autoclavable HARV    | 50 mL  | No            |
| Autoclavable STLV    | 55 mL  | No            |
| Autoclavable STLV    | 110 mL | No            |
| Autoclavable STLV    | 250 mL | No            |
| Autoclavable STLV    | 500 mL | No            |

\* Disposable vessels are available in the High Aspect Ratio Vessels (HARVs). Each vessel is individually packaged and gamma sterilized. Vessels are supplied four to a pack. Four Autoclavable HARVs or STLVs are provided with the RCCS-4D System. All other compatible vessel types are ordered separately. Visit [www.synthecon.com](http://www.synthecon.com) for more details.



**3D Culture Systems**  
for a 3D World

**CellD SARL**  
19 avenue de l'Aspre  
30150 ROQUEMAURE  
France



0033 4 66 82 82 60  
[www.celld.com](http://www.celld.com)  
[contact-info@celld.com](mailto:contact-info@celld.com)

