

## Environmental Test Chambers

### HPCF-288 Series Environmental Chambers (Temperature & Humidity Test Chambers)

#### Features:

- Zero-cross DF-PID type temperature and humidity control
- Mechanical single-stage compression freezing system (Dual freezing system for -70 °C type)
- Air cooling full-sealing rotary freezer
- Constant pressure expansion valve and automatic expansion valve
- Multi-stage plate fin coil refrigerator
- Nichrome wire strip warming heater
- Seeds (plug type) humidifying heater
- Independent overheat protector, independent leakage detection and breaker, reverse-phase protection
- HP-IIC programmable temperature & humidity controller with color touch panel
- HP-IIC operation mode/pattern: fixed-value operation, timer (Time-On/Time-Off), elapsed timer, weekly timer, calendar time operation, programmed operation (32 steps/34 patterns/Max. 1088 steps)
- HP-IIC TFT color LCD display/input (setting, trend graph, operation selectable, error), touch-key input, CF card input (program pattern)
- HP-IIC temperature & humidity electronic sensor (temperature: Pt 100  $\Omega$ , humidity: high polymer electrostatic humidity sensor)
- HP-IIC standard functions: CF card interface, self-diagnosis function (Max. 31), PC integrated control system (Ethernet 10BASE-T)
- Observation window
- Chamber lamp (60W)
- Cable hole with 50 mm internal diameter
- Feed-water pump
- Shelf plates (2)
- Shelf rack holders (2)
- Drip tray
- Operation manuals



#### Options:

- Caster
- Self rack

Large-load shelf rack holder  
 Angle frame  
 Recorder  
 Rotating lamp  
 Left-open door  
 Internal door  
 Different voltage type  
 Dry and wet bulb type  
 Water-cooling freezer

[Click here to convert specifications to US](#)

| Model                                 | HPCF-288-20, HPCF-288-40, HPCF-288-70  |
|---------------------------------------|--|
| Voltage                               | AC200V-3 $\phi$ (50/60Hz, fluctuations +/-10%)   |
| Maximum Current                       | 23A (288-20)<br>23A (288-40)<br>27A (288-70)   |
| Operating Ambient Temperature         | 5 to 35 °C   |
| Temperature Range                     | -20 to +150 °C (288-20)<br>-40 to +150 °C (288-40)<br>-70 to +150 °C (288-70)  |
| Temperature Fluctuation Range         | +/-3.0 °C (+/-0.5 °C at 100.1 to 150 °C)   |
| Temperature Distribution              | +/-3.0 °C (+/-0.75 °C at 100.1 to 150 °C)  |
| Humidity Range                        | 20 to 98% RH   |
| Humidity Fluctuation Range            | +/-2.5% RH   |
| Humidity Distribution                 | +/-2.0% RH   |
| Temperature Warm-up Time (at 23 °C)   | -20 °C to +150 °C Less than Approx. 55 min. (288-20)<br>-40 °C to +150 °C Less than Approx. 55 min. (288-40)<br>-70 °C to +150 °C Less than Approx. 75 min. (288-70) |
| Temperature Cool Down Time (at 23 °C) | +20 °C to -20 °C Less than Approx. 50 min. (288-20)<br>+20 °C to -40 °C Less than Approx. 60 min. (288-40)<br>+20 °C to -70 °C Less than Approx. 90 min. (288-70)    |
| External Material                     | Stainless steel plate (SUS430HL) hair-line finish  |
| Chamber Material                      | Stainless steel (SUS304BA) mirror finish   |
| Insulation Material                   | Glass wool   |
|                                       |  |

|                              |   |
|------------------------------|---|
| Freezer Capacity             | 1.1 kW (288-20)<br>1.1 kW (288-40)<br>1.1 kW X 2 (288-70)   |
| Warmer Capacity              | 3.6 kW  |
| Humidifier Capacity          | 2.6 kW  |
| Agitation Fan in the Chamber | Sirocco fan 60W   |
| Tank Water Quality           | Demineralized water less than 10 µS/cm  |
| Content Volume               | 288 L   |
| Inside Dimensions            | 600W x 600D x 800H mm (288-20)<br>600W x 800D x 800H mm (288-40)<br>600W x 600D x 800H mm (288-70)          |
| Outside Dimensions           | 1120W x 1170D x 1680H mm (288-20)<br>1120W x 1170D x 1680H mm (288-40)<br>1120W x 1315D x 1680H mm (288-70) |
| Weight                       | 330 kg (288-20)<br>330 kg (288-40)<br>430 kg (288-70)   |

---

**Factory Sales and Technical Support Center**

Hastest Solutions Inc., 4423 Fortran Drive, Building 190, San Jose, CA 95134, USA

Tel: 408 945 7861 Fax: 408 262 6699