DAY-TO-DAY CONCERNS IN TYPICAL EDGE APPLICATIONS

Room Renovation
Housing all components
Takes 15-20 days to build
Footprint: 10-20 sqm.

Cleanliness & Noise
Aesthetics
Balancing operations in an
organized DC
Fan noise exceeding 65dB levels

Integrating Design Activity
Time-consuming advances
step-wise wastage of material

Monitoring
High CAPEX for integration
Complex processes for integrating all systems

Power Distribution
Separate UPS+Battery
Tedious Power
Management and wall mounted panels

Cooling System
Cooling requires N+1
configuration
SHR>0.95 requires Heaters/
Humidifier operation

Primary IT Infrastructure
area of Concern in
mission-critical Edge Applications

• Justifying the area for Edge Application facility in crunched floor spaces
• Accommodating all the essential components in a minimal footprint
• Compromising your output capacity due to space constraints

Enterprises in today’s dynamic era need to address these concerns with a streamlined solution in a well-planned ecosystem followed by easy upkeep, all in a low carbon, compact footprint.

There is a need for turnkey infrastructure for edge applications that includes:
• Standardized configurations that are tailored to the application, factory integrated, validated and toasted.
• High availability with network independent remote management and extensive emergency service coverage.
• Secure physical and remote access with on-site intrusion detection and user rights-driven remote management.
Enter SmartCabinet™, a pre-configured, self-contained solution that offers the efficiency, economy, interoperability, and control to implement an exceptional infrastructure strategy.

- **Economical** - Reduces implementation costs compared to conventional solutions
- **Simplified** - Maximize use of existing infrastructure and gets up-and-running in a matter of weeks
- **Controllable** - Enforce add/change policies, speeds IT administration request response times significantly

**SmartCabinet™- The spirit of innovation**

- Pre-designed and factory assembled
- No room renovation required
- Rack Level Security System
- Enclosed sealed cabinet
- SPOC for all components, global service network
- Built-in UPS+ Battery installed
- Silent operation suited for office spaces
- New power Management Block (PMB)
- Dedicated Rack mount cooling + emergency funds
- Aesthetically designed
SmartCabinet™- PERFECT SOLUTION FOR EDGE APPLICATIONS

Distinctive Benefits in small sizes
- Components work as an integrated force
- Fully-protected from dust, moisture, and rodents
- Emergency temperature control cooling
- Integral UPS & back-up autonomy
- Standard Class C lighting protection
- Integrated fire suppression system

Efficient I & C
- Rapid deployment with single day boot-up
- Factory-assembled and pre-loaded
- Doesn’t require outdoor units to be installed
- Fits in your existing whitespace

Savings on electricity bill
- Equipped with a variable frequency compressor for capacity modulation at part loads
- Pre-defined path for cold air and hot air circulation
- Annualized PUE < 1.5

Think Smart, Act Smart
- 9-inch touch screen + remote WEB access
- Remote door access control
- Centralized control for 256 units
- SMS & Emails can be registered for notifications
- The door & in-cabinet lights operate intelligently
- Intelligent monitoring & control with RDU-M
INTERNAL ARCHITECTURE: SmartCabinet™

**Built-in Power Management Unit (PMU)**
Provides MCB to UPS, Cooling unit, PDU, and UPS bypass. It also provides surge protection to SmartCabinet™ solution.

**Intuitive LCD Display Panel**
9” inch Touch Panel display that provides easy access to information for power, thermal management, and security.

**Centralized Monitoring Empowered by RDU-M**
One-stop management utility for supervision and management of power, thermal, environment and security ecosystem via the interactive touch-based LCD display.

**UPS & Batteries**
5kVA On-line double conversion UPS and battery cabinet ensures clean power feeding to critical IT equipment. It also provides backup power to emergency fans during power outages.

**Thermal Management & Emergency Fans**
Provides up to 3.5kW cooling capacity directly to the IT equipment. Front & rear emergency fans automatically run during power outages ensuring continuous air-ventilation.

**Lighting System**
Low power consumption LED lights that automatically light up on opening the door.

**Smart Lock**
A door lock system that can provide access through ID card and physical key. It records access control history log, activates alarm for unclosed door timeout and supports remote door opening.
**Internal Architecture: SmartCabinet™ Premium**

- **Centralized Monitoring Empowered by RDU-M**
  One stop management utility for supervision and management of power, thermal, environment and security ecosystem via the interactive touch-based LCD display.

- **Lighting System**
  Low power consumption LED lights that automatically light up on opening the door.

- **IP54 Marking Enclosure**
  Fully protected from dust, moisture and splashing of water.

- **Thermal Management**
  Provides up to 3.5kW cooling capacity directly to the IT equipment.

- **Intuitive LCD Display Panel**
  9" inch Touch Panel display that provides easy access to information for power, thermal management, and security.

- **Power Management Block (PMB)**
  Integration of PMU and PDU, provides surge protection and Power distribution to SmartCabinet™ solution.

- **UPS & Batteries**
  6kVA on-line double conversion UPS and battery cabinet ensures clean power feeding to critical IT equipment. It also provides backup power to emergency fans during power outages.

- **Smart Lock**
  A door lock system that can provide access through ID card and physical key. It records access control history log, activates alarm for unclosed door timeout and supports remote door opening.

- **Emergency Fans**
  Front and rear emergency fans automatically run during power outages ensuring continuous air-ventilation.
# TECHNICAL SPECIFICATION

<table>
<thead>
<tr>
<th>Parameter</th>
<th>SmartCabinet™ 600mm</th>
<th>SmartCabinet™ 600mm</th>
<th>SmartCabinet™ 800mm</th>
<th>SmartCabinet™ Premium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabinet Size (H×W×D)</td>
<td>2100×600×1200 (mm)</td>
<td>2000×600×1200 (mm)</td>
<td>2000×800×1200 (mm)</td>
<td>2000×800×1100 (mm)</td>
</tr>
<tr>
<td>Usable U space</td>
<td>18U</td>
<td>29U</td>
<td>29U</td>
<td>42U</td>
</tr>
<tr>
<td>Air Flow Management Pane</td>
<td>5U×3, 2U×3, 1U×2</td>
<td>5U×3, 2U×3, 1U×2</td>
<td>5U×3, 2U×3, 1U×2</td>
<td>5U×3, 2U×3, 1U×2</td>
</tr>
<tr>
<td>Outdoor Unit for Air conditioner</td>
<td>Integrated</td>
<td>Split</td>
<td>Split</td>
<td>Split</td>
</tr>
<tr>
<td>Vertical Cable Management Panel</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Area (incl. service space)</td>
<td>1.5 m²</td>
<td>1.5 m²</td>
<td>2.0 m²</td>
<td>2.0 m²</td>
</tr>
<tr>
<td>Color</td>
<td>RAL7021 Black</td>
<td>IP5X</td>
<td>IP54</td>
<td></td>
</tr>
<tr>
<td>IP Marking</td>
<td>9&quot; Touch Panel LCD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Display Panel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Display Languages</td>
<td>English/ Chinese</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LED Lighting</td>
<td>2, Front &amp; Rear</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System Luminance</td>
<td>88lux/ 1M</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UPS Type (Liebert ITA)</td>
<td>5kVA</td>
<td>5kVA</td>
<td>5kVA</td>
<td>6kVA</td>
</tr>
<tr>
<td>UPS Backup Time</td>
<td>10 minutes @ 3kW</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System Capacity</td>
<td>3kW</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System Input Requirement</td>
<td>50A, Single Phase 220/230/240 V</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System Frequency</td>
<td>Compatible with 50Hz and 60Hz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power Distribution Units (PDU)</td>
<td>16A input, 12×C13+4×C19, 2 pcs/ 32A input, 18×C13+6×C19, 2pcs</td>
<td>16A input, 14×C13+2×C19, 1 pc (PMB) 16A input, 12×C13+4×C19, 1 pc (PDU)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refrigerant</td>
<td>R410A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Fan</td>
<td>Two, one at front bottom and one at rear top</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System Management (UPS/ Cooling/ PDU)</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature Sensor</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Leak Detection</td>
<td>1 piece, 5 meters long</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Door Access Sensor</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Door Lock System</td>
<td>Electronics Lock</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noise Level</td>
<td>&lt; 58dB¹</td>
<td>&lt; 58dB¹ (excluding outdoor unit)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Weight</td>
<td>374.5 kg/ 332.5kg</td>
<td>362.5 kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-rack Cooling Unit</td>
<td>Rack Mounted, 6U</td>
<td>Side Mounted, 0U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power Management Unit (PMU)</td>
<td>Rack Mounted, 2U</td>
<td>Side Mounted, 0U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooling Unit supported by UPS</td>
<td>No</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power Management Block (PMB)</td>
<td>No</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Conditions apply
*Specification are subject to change without any further notification
*1- Higher than class 2 Decibel level in Environmental Quality standard for Noise local standards