Service Quick Guide
Indonesian Catalog
About DKSH

As the leading provider of Market Expansion Services with a focus on Asia, we help companies to grow their business in new and existing markets. We blend Swiss reliability, professionalism and best practice corporate governance and compliance of uninterrupted presence in Asia.

Our Business Units

Our business units focus on the fields of **consumers goods, healthcare, performance materials and technology** and offer a comprehensive range of Market Expansion Ser-

Technology - Specialized Industrial Application (IAP)

**Data Center Infrastructure and Management.** We provide AC power, thermal management (precision cooling), cabinet and accessories, data center monitoring and efficiency improvement. Turnkey solutions range from simple smart cabinets, containerized data centers to tier four data centers.

**Power Solutions.** Stable and reliable power is crucial for many industries. Power disturbances can be encountered in many different ways as in power outage, unstable voltage and noise in the electric system. We provide you with the most robust products such as micro-, small-, medium-, large-, modular-, and industrial UPS (Uninterruptible Power Supply), Active Filters, ATS (Automatic Transfer Switches), TVSS (Transient Voltage Surge Suppressor) and load bank for your power needs.

Our Partners

We partner with world class suppliers in providing innovative technology and best in class products in the industry
Service Quick Guide

Proactive equipment maintenance reduces downtime and extends equipment life. This, in turn, maximizes return on investment and increases system availability.

DKSH - Vertiv supports the entire critical infrastructure with extensive service offerings, enhancing network availability and ensuring total peace of mind. Our approach to servicing critical infrastructure covers all aspects of availability and performance, from single power and cooling equipment to entire mission-critical systems.

Installation, start-up, commissioning, site assessments, battery maintenance, replacements, upgrades, retrofits, 24/7 emergency service and remote monitoring and diagnostics are just a selection of the services that contribute to guaranteeing business continuity.

Local Resources

The broadest and most comprehensive service footprint in the industry, DKSH - Vertiv ensures that your business is protected 100% of the time and that assistance is close by whenever needed. Our Customer Support Center professionals are available 24/7 to provide real-time service support.

Prompt Response

An extensive supply of critical parts ready for deployment allows Customer Engineers to respond to requests in record time, guaranteeing a premium first-time fix-rate in the unlikely event of system failure.
Expertise & Training
DKSH - Vertiv service engineers are trained, experienced professionals who undergo an average of one week intensive training each quarter, totaling one month of full time training per year. All service engineers are certified according to the standards of each country on top of global certifications required by international regulations.

Systematic Trouble shooting in four steps

<table>
<thead>
<tr>
<th>Trouble shooting</th>
<th>Purpose</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognized and describe a problem</td>
<td>Short and prioritize concerns and plan their resolutions</td>
<td>List concerns</td>
</tr>
<tr>
<td>Find the true cause of deviation</td>
<td>Describe, develop and prove the true cause</td>
<td>Consider objective, alternatives and risks</td>
</tr>
<tr>
<td>Select a fix</td>
<td>Make the best balanced choice</td>
<td>Value and commitment</td>
</tr>
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Avoid future problems
Build long term trust

Service Contracts
Regular service of business critical infrastructure provides uptime assurance and reduces the total cost of ownership over the life of the equipment. A service contract ensures that infrastructure is regularly maintained in order to avoid unexpected and costly downtime. DKSH - Vertiv service contracts cover all technologies and can be

“Recognize and describe a problem - A Problem Well-defined is a Problem Half-solved”
**Servicing Critical Infrastructure**

Vertiv factory trained and authorized engineers are industry experts because Vertiv services more data center critical infrastructure than any other player in the industry. We understand data centers better than anyone.

With the most comprehensive and rigorous training and job progression process in the industry, our Customer Engineers (CE) are the data center services experts. Each CE undergoes induction and hands on training before deployment to your critical infrastructure and has a minimum of 40 hours of training/continuing education each year.

**Cooling System Service**

 ***Optimized system performance***
- Commissioning and site acceptance testing
- Preventive maintenance
- Emergency services
- On-site repair capabilities
- Upgrades and replacements
- Assessments and testing

**AC Power Services**

***Increased system availability***
- Commissioning and site acceptance
- Preventive maintenance
- Emergency services
- On-site repair capabilities
- Upgrades and replacements
- Assessments and testing
- Power distribution unit testing and maintenance

**Battery Maintenance & Replacement Services**

***Preventive maintenance inspection and testing follows industry recognized standards, OEM specifications and requirements***
- Battery load testing
- Battery health testing using Impedance, internal resistance or conductance-reliable and safe testing of battery aging status
- Full string replacements
- Expert installation of new cells
- Battery monitoring
- Certified disposal of used batteries
- Lubrication and torque checks
- Thermography

**24/7 Emergency Service**

***Response and resolution for minimized downtime***
- Factory trained expert engineers available 24/7
- Guaranteed on-site response time
**Installation, Start Up & Commissioning**
Complete turnkey capability
- Factory trained experts carry out professional installation
- Installation and pre-power checks
- Optimized hardware and software configurations
- Operational and functional testing

**Remote & Site Monitoring Services**
System-wide monitoring solutions
- 24 hour help desk support by expert engineers
- Remote preventive maintenance for proactive identification of anomalies
- Remote battery testing
- Alarm management
- Field incident resolution
- Equipment optimization advice
- 24/7 customer access via internet
- Third party equipment integration
- Customized reports
- Integration with high level platforms via SNMP

**Upgrade & Retrofits**
Increased infrastructure life and optimized energy efficiency
- EC fans enhance energy savings on installed equipment
- ICOM Control enables modern communication capabilities of multiple units
- Xtreme Power Factor maximizes UPS power for critical IT loads
- Programmed fan and capacitor replacements extend UPS service life

**Data Center Assessments**
Complete infrastructure audits maximize system availability and enhance data center efficiency
- Airflow, heat and power assessments
- Temperature measurements
- Floor plan layout
- Reporting
- Recommendation

**Spare Parts**
Delivering the fastest system recovery
- Extensive availability of spare parts
- Access to captive spare parts
- 24 hours express delivery for on-stock spares
Service Contract Portfolio

The regular maintenance of the critical infrastructure which supports business operations is vital. The most comprehensive insurance for business protection can be obtained with a service contract. From single equipment to entire systems, DKSH’s complete range of service provides customers with service agreements tailored to meet individual business needs.

DKSH’s service offering ensures that customers can rely on continuous system availability, increased uptime, fast downtime recovery, minimized operating costs and maximized return on investment, while entirely protecting their assets.

Maintenance Agreements (After Warranty)

- 24/7 remote monitoring and diagnostic service
- A defined number of scheduled preventive maintenance visits
- 24/7 emergency service with priority on-site response for emergency breakdowns
- Inclusive / exclusive of parts and labor

Our Benefits

- We have dedicated person in charge to managed under-contract costumers
- Original spare-part from manufactured
- Certified engineer

Installation Stage

<table>
<thead>
<tr>
<th>Start Up</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assembly and installation Interconnect cable</td>
<td>Optional</td>
</tr>
<tr>
<td>Test &amp; commissioning</td>
<td>Mandatory or warranty failed</td>
</tr>
</tbody>
</table>
**Operation Stage**

A service packages designed to improve system uptime at a predictable cost

<table>
<thead>
<tr>
<th>Offer Packages</th>
<th>Non comprehensive</th>
<th>Comprehensive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical support 7x24</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Scheduled preventive maintenance visit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Next business day on-site response*</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>4 hours on-site services</td>
<td>Not included</td>
<td></td>
</tr>
<tr>
<td>Remote monitoring services**</td>
<td>Not included</td>
<td>✔</td>
</tr>
<tr>
<td>Priority access to the supply chain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parts***</td>
<td>Discount rates</td>
<td>All included</td>
</tr>
<tr>
<td>Labor &amp; travel</td>
<td>All included</td>
<td>All included</td>
</tr>
<tr>
<td>Asset capacity trending report</td>
<td>Not included</td>
<td>All included</td>
</tr>
<tr>
<td>Data center health check</td>
<td>Not included</td>
<td>All included</td>
</tr>
</tbody>
</table>

**Modernization Stage**

Provide customers the solutions to increase their system’s performance and availability while maximizing their investment

<table>
<thead>
<tr>
<th>Modernization Features</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>All-inclusive service</td>
<td>Modernization includes the UPS and PAC units or components, on-site service labor, and travel expenses, all at a fixed cost.</td>
</tr>
<tr>
<td>Flexible service scheduling</td>
<td>On-site delivery of the components and scheduling of the replacement service are coordinate to suit your requirements</td>
</tr>
<tr>
<td>On-site certified service professionals</td>
<td>Provides a one-time on-site visit of certified customer engineer(s), trained to safely replace your UPS and PAC with minimal interruption to your critical operations</td>
</tr>
<tr>
<td>New, up-to-date manufacture products</td>
<td>Buy with the confidence of knowing you are purchasing quality units or components that are specifically designed and updated to produce maximum reliability for your system, directly from the manufacturer</td>
</tr>
<tr>
<td>System configuration</td>
<td>Updates the system with new component information and verifies your UPS and PAC is functioning to specification</td>
</tr>
<tr>
<td>One or multiple years service contract</td>
<td>Provides one or multiple years service contract plan, including on-site service, parts, travel and labor, and one preventive maintenance visit</td>
</tr>
</tbody>
</table>

**Advance Service**

Provide service action to meet efficiency through on going operations by auditing the equipment and it’s environment