

Liebert PSI

High Performance Power Protection for Servers and Networking Equipment 750VA to 3kVA AC Power for Business-Critical Continuity™



Liebert PSI is a feature-rich UPS system with industry leading 0.9 power factor. Its high power output delivers superior performance on power factor corrected (PFC) power supply and satisfactory backup time in the high demand environment. Liebert Multilink UPS software protects servers through local USB communication or via network. Matching external battery cabinets offer UPS backup time to several hours in the extended requirements (for Liebert PSI-XR models only).



The Liebert PSI Is Ideally Suited For:

- Network Computers
- Servers
- Network Closets
- Computer Rooms
- Large Network Peripherals
- Network Storage Devices

Features

Lowest Total Cost of Ownership

- Operates at a high 0.9 power factor that makes it ideal for today's modern IT equipment, providing 29% more power than typical UPS
- Reduced installation time and costs shipped with batteries connected and charged
- Two-year warranty no-hassle replacement
- Supports Liebert Multilink shutdown software

Higher Availability

- Greater than three to five minutes of internal battery backup time at 100% load provides ample time for an orderly shutdown of equipment.
- Buck/boost automatic voltage regulation technology protects against utility voltage fluctuation by raising and lowering utility power to the level needed by connected equipment

Flexibility

- Eight to nine battery-backed outlets for Liebert PSI models, six to sever battery-backed outlets for Liebert PSI-XR models
- User replaceable and hot-swappable batteries
- Rack/Tower Convertible with rotatable display panel, 2U in height on all models
- Multiple remote communications and shutdown options provide remote monitoring and power management - EB/ SNMP, USB, contact closure and remote power off

Bringing our Enterprise Level IT Expertise to your SMB

Emerson Network Power offers a full range of power protection solutions suitable for every requirement or scenario. From desktop computing, network equipment, computer rooms to large scale data

centers, we make sure you get the same level of protection the Fortune 500 companies enjoy with Emerson. It is our way of Bringing Enterprise Level IT expertise to your SMB.



Desktop Computing

- Liebert PSP
- Liebert PSA



Network / Computer Room

- Liebert PSI
- Liebert GXT
- Liebert ITA



Data Center

- Liebert ITA
 - Liebert NX
- Liebert Hipulse

Reliable UPS Protection And Extended Battery Time To Keep Your Network Up And Running

The flexible design of Liebert PSI allows the unit to be configured as a self-standing tower or to be rack-mounted within a 2U space. It is available in four capacities, in both 120V or 230V models.

The UPS features an innovative design incorporating buck/boost automatic voltage regulation technology. This protects against utility voltage fluctuation by raising and lowering utility power to the level needed by the connected equipment. It also allows the UPS to prolong battery life by maximizing its time on utility power before going to battery.



Rotatable Display Panel 90 degrees rotatable LED display panel rotates 90° to make the readout of the LED display easy to see in rack or tower position.

Automatic Frequency Sensing The UPS automatically adjusts to the input frequency, 50Hz or 60Hz.

Liebert Multilink software provides you:



- Warnings to computer users of power loss, and graceful operating system shutdown when needed
- Full functionality and automatic shutdown protection right out of box - virtually no configuration is required
- Intergration with Liebert Web card and network shutdown capability





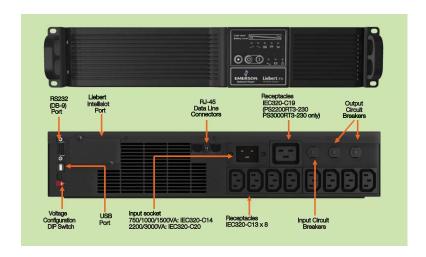
Optional Liebert MicroPOD Output Distribution And Maintenance Bypass Module

When your computer system can't be without power, even for scheduled UPS maintenance, the Liebert MicroPOD Maintenance Bypass and Output Distribution Unit ensures continuous uptime. It allows you to manually transfer connected equipment to utility power via a maintenance bypass switch, permitting scheduled service or UPS replacement without the need to shut down connected equipment. Features include:

- 2U height minimizes rack space requirements
- Installs with plug-and-play ease
- Two-year, no-hassle replacement warranty

Optional Liebert IntelliSlot Web Card provides SNMP and web-based management

Liebert PSI Rear View Parts





Po Box 5322, Daisy Hill QLD 4127

Liebert PSI-XR





Battery Runtime Chart of Liebert PSI-XR

(Runtimes are in minutes, assuming fully charged batteries at 25°C)

| Number of batteries | %Load | PS100RT3-230XR | PSI500RT3-230XR | PS2200RT3-230XR | PS3000RT3-230XR |
|-------------------------------------------------|-------|----------------|-----------------|-----------------|-----------------|
| Internal Battery | 50 | 15 | 13 | 14 | 13 |
| | 100 | 6 | 5 | 5 | 5 |
| Internal Battery+1 External | 50 | 73 | 55 | 45 | 31 |
| Battery Cabinet | 100 | 31 | 18 | 15 | 12 |
| Internal Battery+2 External | 50 | 129 | 95 | 67 | 56 |
| Battery Cabinets | 100 | 65 | 46 | 29 | 18 |
| Internal Battery+3 External | 50 | 181 | 131 | 95 | 73 |
| Battery Cabinets | 100 | 96 | 64 | 48 | 31 |
| Internal Battery+4 External Battery Cabinets | 50 | 233 | 167 | 143 | 95 |
| Battery Cabinets | 100 | 124 | 82 | 72 | 47 |
| Internal Battery+5 External | 50 | 185 | 203 | 167 | 113 |
| Battery Cabinets | 100 | 151 | 109 | 84 | 56 |
| Internal Battery +6 External | 50 | 336 | 239 | 191 | 131 |
| Battery Cabinets | 100 | 179 | 124 | 102 | 65 |

^{*} For connecting more external battery cabinets, please contact Emerson staff

High Performance Power Protection for Server and Networking Equipment with Extended Run Capability

For servers and networks requiring extended runtime, Liebert PSI-XR provides longer backup time with additional features on top of Liebert PSI. Liebert PSI-XR has matching external battery cabinets that enables longer backup time to several hours in the extended requirements. It provides greater than five minutes of internal battery backup time at 100% load measured at pf 0.9.

| Model Number | | PS1000RT3- 230XR | PS1500RT3- 230XR | PS2200RT3- 230XR | PS3000RT3- 230XR | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|--|--|
| Input Connection | | IEG-320 C14 IEG-320 C20 | | | | | |
| Output Connection | | IEC-320 C13 x 6 IEC-320 C13 x 6 + C19 x 1 | | | | | |
| Communication Interface | | REPO, USB, Serial, Intellislot | | | | | |
| Dimensions: (mm) | | 88(2U) x 44 | 0 x 490.5 | 88 (2U) x 44 | 0 x 700.5 | | |
| Shipping Dimensions: (mm) | | 228 x 56 | 0 x 612 | 228 x 56 | 0 x 821 | | |
| Net Weight: (kg) |) | 25 | 25 28 | | 46 | | |
| Shipping Weigh | t: kg | 29 | 32 | 47 | 51 | | |
| Form Factor | , | Rack/1 | Γower Convertible, Τ | ower Stand included | | | |
| Input Power Cal | ble | Nil | | "Shucko" CEE 7/7 and | | | |
| | | 1 | BS1363 to IEC-320-C19 | | | | |
| Number of Outp | out Cable | 2 | | | | | |
| Software | | Liebert Multilir | k 4, support for Win | | | | |
| Operation | | | PS1500RT3- 230XR | PS2200RT3- 230XR | PS3000RT3- 230XR | | |
| Capacity (Volt-A | Amps, Watts) | 1000/900 | 1500/1350 | 2200/1980 | 3000/2700 | | |
| Norminal Input \ | Voltage | | 220/230/240VAC | (configurable) | | | |
| Input Voltage W | findow | | 165-30 | 0VAC | | | |
| Input Frequency | | 1 | 45-6 | 5Hz | | | |
| Input Protection | | | Resettable Circ | cuit Breaker | | | |
| Default frequence | | | 501 | Hz | | | |
| Boost Mode Vol | | 1 | Input Voltag | e x 117% | | | |
| Buck Mode Volt | | | Input Voltage | | | | |
| Transfer Time (A | AC to DC) | | 4-6 ms | | | | |
| Efficiency | · · · · · · · · · · · · · · · · · · · | | >96% on L | ine Mode | | | |
| Surge Protection | n | | 220 J | | | | |
| Output | Voltage | 220/230/240VAC (configurable) | | | | | |
| (battery mode) | Voltage Regulation | >± 5% | | | | | |
| mode) | Wave Form | Pure Sine Wave | | | | | |
| Battery type | | Sealed, non-spillage, maintenance-free, lead acid with 5 year | | | | | |
| | , | typical lifetime | | | | | |
| Backup Time at | full load pf 0.9 | >6 minutes | >5 minutes | >5 minutes | >5 minutes | | |
| Typical Recharg | ge Time | | 5 hours | to 90% | | | |
| Hot Swappable | Battery | Yes | | | | | |
| EMI Classification | on | IEC/EN/AS62040-2 | | | | | |
| Agency Approvals | Safety | IEC/EN/AS62040-1-1 | | | | | |
| Approvais | Transportation | | ISTA Procedure 1. | A Certification | | | |
| | WEEE and ROHS | | Yes | | | | |
| Operation Condition | | | | | | | |
| , | lition | 3,00 | 0 meter max. elevati | | non- | | |
| | lition | 3,00 | condensing | 0-40 deg. C | non- | | |
| Noise Level | dition | | condensing >40dBA on I | 0-40 deg. C Line Mode | | | |
| | lition | 3,00 PS1000RT3- 230XR | condensing | 0-40 deg. C | PS3000RT3- 230XR | | |
| Noise Level | | PS1000RT3- | condensing >40dBA on I PS1500RT3- | 0-40 deg. C Line Mode PS2200RT3- 230XR | PS3000RT3- | | |
| Noise Level Accessories | | PS1000RT3- | condensing >40dBA on I PS1500RT3- 230XR | 0-40 deg. C Line Mode PS2200RT3- 230XR | PS3000RT3- | | |
| Noise Level Accessories Rack Mount Kit | anagement Card | PS1000RT3- | condensing >40dBA on I PS1500RT3- 230XR RAILKITPS | 0-40 deg. C Line Mode PS2200RT3- 230XR | PS3000RT3- | | |
| Noise Level Accessories Rack Mount Kit SNMP/WEB Ma | anagement Card ypass Switch | PS1000RT3- | condensing >40dBA on I PS1500RT3- 230XR RAILKITPS IS-WE | 0-40 deg. C Line Mode PS2200RT3- 230XR | PS3000RT3- 230XR MP2-220L | | |
| Noise Level Accessories Rack Mount Kit SNMP/WEB Ma Maintenance By | anagement Card ypass Switch ry Cabinets | PS1000RT3- 230XR | condensing >40dBA on I PS1500RT3- 230XR RAILKITPS IS-WE | 0-40 deg. C Line Mode PS2200RT3- 230XR S3G-AEC BRT3 | PS3000RT3- 230XR MP2-220L | | |
| Noise Level Accessories Rack Mount Kit SNMP/WEB Ma Maintenance By Extended Batter | anagement Card ypass Switch ry Cabinets | PS1000RT3- 230XR PSRT3-2 | condensing >40dBA on I PS1500RT3- 230XR RAILKITPS IS-WE MP2-210K 24VBXR PS1500RT3- | 0-40 deg. C ine Mode PS2200RT3- 230XR 33G-AEC BRT3 PSRT3-2 PS2200RT3- | PS3000RT3- 230XR MP2-220L BVBXR PS3000RT3- | | |
| Noise Level Accessories Rack Mount Kit SNMP/WEB Ma Maintenance By Extended Batter Typical Runtime | anagement Card ypass Switch ry Cabinets | PS1000RT3- 230XR PSRT3-2 PS1000RT3- 230XR | condensing >40dBA on I PS1500RT3- 230XR RAILKITPS IS-WE MP2-210K 24VBXR PS1500RT3- 230XR | 0-40 deg. C Line Mode PS2200RT3- 230XR 33G-AEC BRT3 PSRT3-4 PS2200RT3- 230XR | PS3000RT3- 230XR MP2-220L 8VBXR PS3000RT3- 230XR | | |
| Noise Level Accessories Rack Mount Kit SNMP/WEB Me Maintenance By Extended Battel Typical Runtime | anagement Card ypass Switch ry Cabinets | PS1000RT3- 230XR PSRT3-2 PS1000RT3- 230XR 55 minutes | condensing >40dBA on I PS1500RT3- 230XR RAILKITPS IS-WE MP2-210K 24VBXR PS1500RT3- 230XR 70 minutes | 0-40 deg. C ine Mode PS2200RT3- 230XR 33G-AEC BBRT3 PSRT3-4 PS2200RT3- 230XR 85 minutes | PS3000RT3- 230XR MP2-220L 8VBXR PS3000RT3- 230XR 110 minutes | | |
| Noise Level Accessories Rack Mount Kit SNMP/WEB Ma Maintenance By Extended Batter Typical Runtime 200/180 400/360 | anagement Card ypass Switch ry Cabinets | PS1000RT3- 230XR PSRT3-2 PS1000RT3- 230XR 55 minutes 25 minutes | condensing >40dBA on I PS1500RT3- 230XR RAILKITPS IS-WE MP2-210K 24VBXR PS1500RT3- 230XR 70 minutes 32 minutes | 0-40 deg. C Line Mode PS2200RT3-230XR 83G-AEC BRT3 PS2200RT3-220XR PS2200RT3-230XR 85 minutes 55 minutes | PS3000RT3- 230XR MP2-220L BVBXR PS3000RT3- 230XR 110 minutes 70 minutes | | |
| Noise Level Accessories Rack Mount Kit SNMP/WEB Ma Maintenance By Extended Batter Typical Runtime 200/180 400/360 600/540 | anagement Card ypass Switch ry Cabinets | PS1000RT3- 230XR PSRT3-2 PS1000RT3- 230XR 55 minutes 25 minutes 14 minutes | condensing >40dBA on I PS1500BT3- 230XR RAILKITPS IS-WE MP2-210K 24VEXR PS1500BT3- 230XR 70 minutes 32 minutes | 0-40 deg. C _ine Mode P\$2200RT3_230XR 83G-AEC BRT3 P\$RT3-4 P\$2200RT3_230XR 85 minutes 55 minutes 31 minutes | PS3000RT3- 230XR MP2-220L BVBXR PS3000RT3- 230XR 110 minutes 70 minutes 46 minutes | | |
| Noise Level Accessories Rack Mount Kit SNMP/WEB Ma Maintenance By Extended Battel Typical Runtime 200/180 400/360 600/540 800/720 | anagement Card ypass Switch ry Cabinets | PS1000RT3-230XR PSRT3-2 PS1000RT3-230XR 55 minutes 25 minutes 14 minutes 9 minutes | condensing >40dBA on I PS1500RT3- 230XR RAILKITPS IS-WE MP2-210K 24VBXR PS1500RT3- 230XR 70 minutes 32 minutes 13 minutes | 0-40 deg. C ine Mode PS2200RT3-230XR S3G-AEC BRT3 PS2200RT3-230XR 85 minutes 55 minutes 23 minutes | PS3000RT3- 230XR MP2-220L 8VBXR PS3000RT3- 230XR 110 minutes 70 minutes 46 minutes 32 minutes | | |
| Noise Level Accessories Rack Mount Kit SNMP/WEB Ma Maintenance By Extended Batter Typical Runtime 200/180 400/360 600/540 800/720 1000/900 | anagement Card ypass Switch ry Cabinets | PS1000RT3-230XR PSRT3-2 PS1000RT3-230XR 55 minutes 25 minutes 14 minutes 9 minutes 6 minutes | condensing >40dBA on I PS1500RT3- 230XR RAILKITPS IS-WE MP2-210K 24VEXR PS1500RT3- 230XR 70 minutes 32 minutes 13 minutes 10 minutes | 0-40 deg. C ine Mode P\$2200RT3- 230XR S3G-AEC BRT3 P\$RT3-4 P\$2200RT3- 230XR 85 minutes 55 minutes 31 minutes 18 minutes | PS3000RT3-230XR MP2-220L 8VBXR PS3000RT3-230XR 110 minutes 70 minutes 46 minutes 32 minutes 24 minutes | | |
| Noise Level Accessories Rack Mount Kit SNMP/WEB Ma Maintenance By Extended Batter Typical Runtime 200/180 400/360 600/540 800/720 1000/900 1500/1350 | anagement Card ypass Switch ry Cabinets | PS1000RT3-230XR PSRT3-2 PS1000RT3-230XR 55 minutes 25 minutes 14 minutes 9 minutes 6 minutes | condensing >40dBA on I PS1500RT3- 230XR RAILKITPS IS-WE MP2-210K 24VEXR PS1500RT3- 230XR 70 minutes 32 minutes 13 minutes 10 minutes | 0-40 deg. C ine Mode P\$2200RT3- 230XR S3G-AEC BRT3 P\$2200RT3- 230XR 85 minutes 55 minutes 31 minutes 18 minutes 11 miuntes | PS3000RT3-230XR MP2-220L 8VBXR PS3000RT3-230XR 110 minutes 70 minutes 46 minutes 32 minutes 24 minutes 13 minutes | | |

Battery Cabinet Specifications

| Model Number | | PSRT3-24VBXR | PSRT3-48VBXR | | |
|------------------------------------------------------------------------|----------------|------------------------------------------------------------|--------------------------------------------|--|--|
| Used w/ UPS Model | | PS1000RT3-230XR / PSI500RT3-230XR | PS2200RT3-230XR / PS3000RT3-230XR | | |
| Unit Dimensions/ Shipping Dim. : (mm) 88(2U) x 440 x 490.5 / 560 x 675 | | 490.5 / 560 x 675 | | | |
| Net Weight / Shipping Weight: kg 29 / 33 | | | / 33 | | |
| Battery Type Sealed, non-spillage, maintenance-fir | | | ee, lead acid with 5 year typical lifetime | | |
| Operation Condition 3,000 meter max. e | | | % humidity non condensing 0-40 deg. C | | |
| Form Factor | | Rack/ Tower Convertible, Tower Stand and rail kit included | | | |
| EMI Classification | | IEC/EN/AS62040-2 2nd Ed category C2 | | | |
| | Safety | IEC/EN/ AS62040-1-1 | | | |
| Agency Approvals | Transportation | ISTA Procedure IA Certification | | | |
| WEEE and ROHS Yes | | | | | |



Battery Runtime Chart of Liebert PSI

(Runtimes are in minutes, assuming fully charged batteries at 25°C)

| Typical Runtime (Watts) | PS750RT3-230 | PS1000RT3-230 | PS1500RT3-230 | PS2200RT3-230 | PS3000RT3-230 |
|----------------------------|--------------|---------------|---------------|---------------|---------------|
| 200 | 25 | 45 | 60 | 85 | 120 |
| 400 | 10 | 15 | 20 | 45 | 65 |
| 600 | 5 | 8 | 12 | 20 | 30 |
| 800 | - | 5 | 8 | 14 | 18 |
| 1000 | - | - | 5 | 11 | 14 |
| 1500 | - | - | - | 6 | 8 |
| 2000 | - | - | - | - | 5 |
| 2500 | - | - | - | - | 4 |
| 100% load | >4 minutes | >4 minutes | >3 minutes | >3 minutes | >3 minutes |

Actual runtime may vary depending on operating conditions.

Liebert PSI Specifications

| Model Numbe | er | PS750RT3-230 | PS1000RT3-230 | PS1500RT3-230 | PS2200RT3-230 | PS3000RT3-230 | | |
|---------------------|---------------------|----------------------------------------------------------------------------|----------------------------------------------------------------|------------------------------------------------|-----------------------------|-----------------|--|--|
| Input Connect | tion | | IEC-320 C14 | | IEC-3 | 20 C20 | | |
| Output Conne | ection | | IEC-320 C13 x 8 | | | 3 x 8 + C19 x 1 | | |
| Communication | on Interface | REPO, USB, Contact Closure, Intellislot | | | | | | |
| Dimensions: (r | mm) | 88(2U) x 440 x 412 88 (2U) x 440 x 657 | | | | | | |
| Shipping Dime | ensions: (mm) | | 228 x 560 x 595 | | 228 x 5 | 60 x 776 | | |
| Net Weight: (kg) | | 15.0 | 19.4 | 20.9 | 33.8 | 37.2 | | |
| Shipping Weight: kg | | 18.2 | 22.6 | 24.1 | 38.3 | 41.5 | | |
| Form Factor | | Rack/Tower Convertible, Tower Stand included | | | | | | |
| Input Power C | Cable | | Nil | Nil "Shucko" CEE 7/7 and BS1363 to IEC-320-C19 | | | | |
| Number of Ou | tput Cable | 2 3 | | | | | | |
| Software | | | Liebert Multilink, support for Windows NT/2000/XP/Vista, Linux | | | | | |
| Operation | | PS750RT3-230 | PS1000RT3-230 | PS1500RT3-230 | PS2200RT3-230 | PS3000RT3-230 | | |
| Capacity | | 750VA/675W | 1000VA/900W | 1500VA/1350W | 2200VA/1980W | 3000VA/2700W | | |
| Norminal Inpu | t Voltage | | 220/23 | 80/240VAC ± 10% (confi | gurable) | | | |
| Input Voltage | Window | | | 165-300VAC | | | | |
| Input Frequen | cy Window | | | 45-65Hz ± 0.5Hz | | | | |
| Input Protection | on Type | | F | Resettable Circuit Breake | er | | | |
| Default freque | ncy | | | 50Hz | | | | |
| Boost Mode V | /oltage | | | Input Voltage x 117% | | | | |
| Buck Mode Vo | oltage | | | Input Voltage / 115% | | | | |
| Transfer Time | (AC to DC) | 4-6 ms typical | | | | | | |
| Efficiency | | | | >96% on Line Mode | | | | |
| Surge Protect | ion | 220 J | | | | | | |
| Output | Voltage | 220/230/240VAC (configurable) | | | | | | |
| (battery mode) | Voltage Regulation | ± 5% | | | | | | |
| Wave Form | | Pure Sine Wave | | | | | | |
| Battery type | | : | Sealed, non-spillage, mai | ntenance-free, lead acid | with 5 year typical lifetin | ne | | |
| Quantity x Vol | tage x Ah | 2 x 12 x 7.2 | 3 x 12 x 7.2 | 3 x 12 x 9 | 6 x 12 x 7.2 | 6 x 12 x 9 | | |
| Backup Time | at full load pf 0.7 | >6 minutes | >6 minutes | >5 minutes | >6 minutes | >5 minutes | | |
| Backup Time | at full load pf 0.9 | >4 minutes | >4 minutes | >3 minutes | >3 minutes | >3 minutes | | |
| Typical Recha | irge Time | 5 hours to 90% of rated capacity, after full discharge into resistive load | | | | | | |
| Hot Swappab | le Battery | Yes | | | | | | |
| Electrical Fast | Transient | IEC/EN/AS62040-2 2nd Ed Class A | | | | | | |
| Agency | Safety | IEC/EN/AS 62040-1-1 | | | | | | |
| Approvals | Surge | IEC/EN/AS 61000-4-2 | | | | | | |
| | ESD | IEC/EN/AS 61000-4-3 | | | | | | |
| | Susceptibility | IEC/EN/AS 61000-4-4 | | | | | | |
| | Emission | IEC/EN/AS 61000-4-6 | | | | | | |
| | Conducted Immunity | IEC/EN/AS 61000-3-2 | | | | | | |
| | Harmonics | IEC/EN/AS 61000-4-6 | | | | | | |
| | Transportation | ISTA Procedure 1A Certification | | | | | | |
| | WEEE and ROHS | Yes | | | | | | |
| Operation Cor | ndition | | 3,000 meter max. elevat | ion, 0-90% humidity nor | n-condensing 0-40 deg. | С | | |
| Noise Level | <u> </u> | | | <45dBA on Line Mode | | | | |
| Accessories | | PS750RT3-230 | PS1000RT3-230 | PS1500RT3-230 | PS2200RT3-230 | PS3000RT3-230 | | |
| SNMP/WEB N | Management Card | | | IS-WEBRT3 | | | | |
| | Bypass Switch | | MP2 | -210K 4 | 1 | MP2-220L | | |

Emerson Network Power.

The global leader in enabling business-critical continuity.

- AC Power Systems
- Connectivity
- DC Power Systems
- Embedded Power
- Integrated Cabinet Solutions
- Outside Plant
- Power Switching and Control
- Precision Cooling
- Site Monitoring
- Surge Protection
- Embedded Computing
- Services

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