



Efore Shielded System Infrastructure

EMP/HPM protected
power system in cabinet



Product Description

Efore shielded systems infrastructure ESSI™ power system offers compact solution for complete protection and powering the critical equipment of the customer.

ESSI™ is designed for secure networks backhaul or core or similar applications and users like police, rescue, border guard, military and homeland security. Equipment in command, control and communications rooms can be installed inside to cabinet. Private enterprises that need higher security can benefit from enhanced protection.

Utilizing complete protection solution saves total investment costs. There is no need for large room with EMP/HPM protection.

Systems are easy to transport and install due to light weight and ready installed rack space. System includes preinstalled power system with several DC and AC voltages.

Equipment is protected against electronic threats with EMP/HPM protection. Robust cabinet gives protection against unauthorized access and high environment protection with IP54 class.

Features

- EMP/HPM protection for critical equipment and power supply
- High attenuation shielded enclosure and filtering
- Environment protection
- Intrusion protection
- 20U free space in ETSI or 19" form for customer equipment
- Built in battery charger with N+1 redundancy
- Redundancy of cooling fans
- High Capacity Battery in separate cabinet



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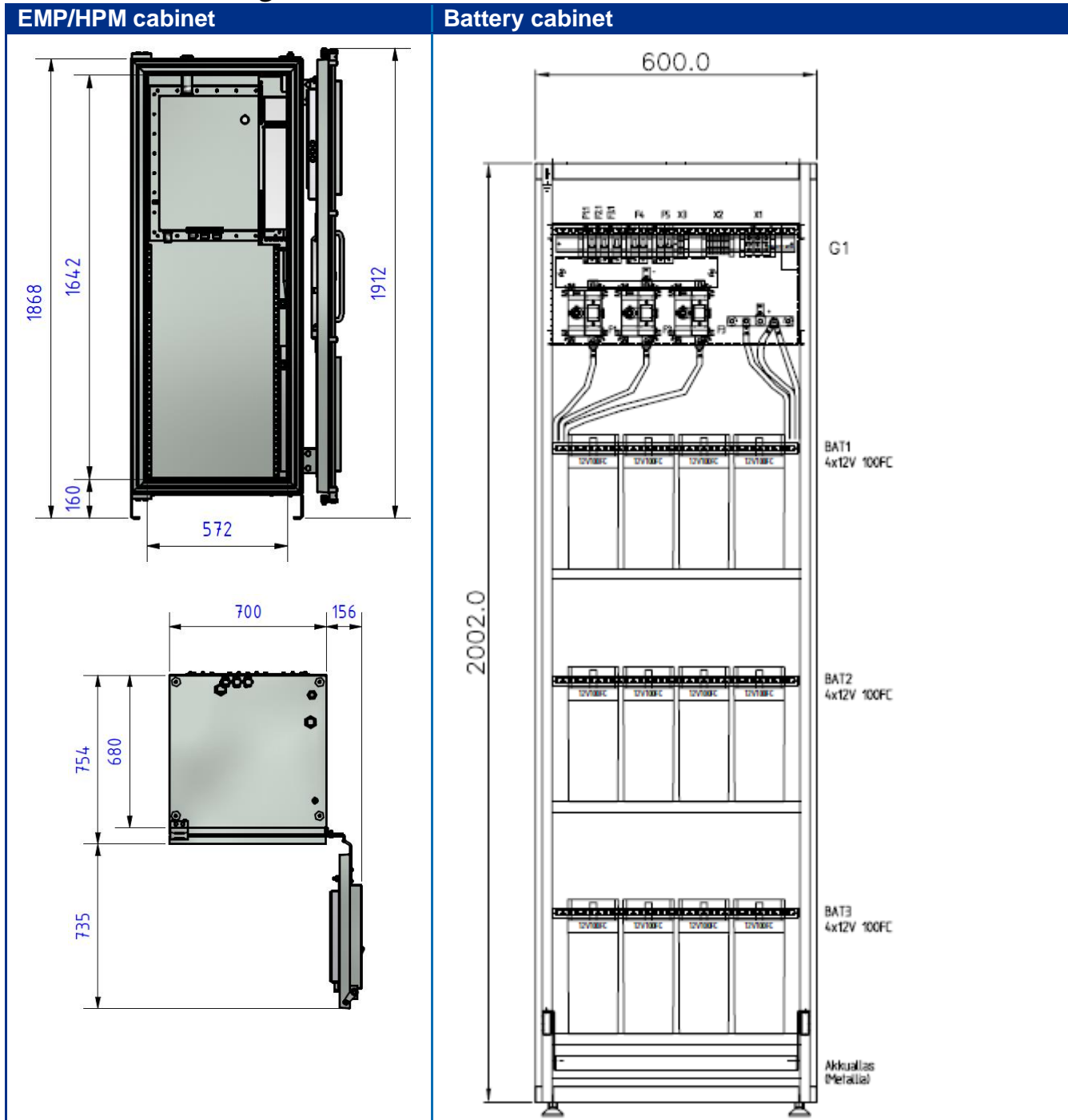
Technical Specifications

| OPUS C 48 4.8 R12U rack, ESSI | |
|--|---|
| Input voltage | 230/400 Vac, 1ph/3ph (3W+N+PE) |
| Output voltage 1 | 48 Vdc, 100A (adjustable xx – xx), with external battery backup |
| Output voltage 2 | 24 Vdc, 2x200 W (converter output) |
| Output voltage 3 | 12 Vdc, 2x100 W (converter output) |
| Output voltage 4 | 230 Vac, 1000 VA (inverter output) |
| Rectifiers | Place for 3 pcs MRC 48-1600 |
| Converters | 1 pc converter submodule: - place for 2 converters 48 Vdc to 24 Vdc - place for 2 converters 48 Vdc to 12 Vdc |
| Inverter | Place for 1 pc 48 Vdc/ 230 Vac inverter. |
| DC Distribution | 48 Vdc: 6 outputs, 1-pole MCB with auxiliary contact 24 Vdc: 5 outputs, 1-pole MCB with auxiliary contact 12 Vdc: 2 outputs, 1-pole MCB with auxiliary contact |
| Power system Controller | VIDI+ I/O with 12 programmable alarm relays. Remote control over LAN or RS-232. |
| Local user interface | LCD |
| Dimensions (H x W x D), Weight | 533 x 438 x 370 mm , 20 kg without rectifiers |
| OPUS C Power system in ESSI-Light, IP54 protected cabinet | |
| Door | Locking and opening detection included. Available as right handed model |
| Environment protection | IP54 |
| Customer equipment | 20U space, in ETSI or 19" rack mounting. 12/24/48 VDC or 230 VAC supply. |
| Power system | - OPUS C 48 application specific 12U rack as ready installed in the cabinet - Main switch, energy meter and 230 Vac PDU |
| Cooling | 3 fans, temperature controlled |
| Codes | Efore NCAGE number A061G. NSN code 6130-58-000-6782. |
| Dimensions (H x W x D), Weight | 2000 x 600 x 800, 165 kg |
| OPUS C Power system in ESSI, EMP/HPM and IP54 protected cabinet | |
| EMP/HPM protection | Better than -60 dB 10 kHz ... 100 kHz Better than -80 dB 100 kHz ... 1 MHz Better than -100 dB 1 MHz ... 18 GHz Final shielding performance depends on selected filtering. |
| Filtering | Mains input, DC output to battery, Data and communications. RS-232 or RS-485 models |
| Door | Locking and opening detection included. Left- or right handed models. |
| Environment protection | IP54 |
| Customer equipment | 20U space, in ETSI or 19" rack mounting. 12/24/48 VDC or 230 VAC supply. |
| Power system | OPUS C 48 in 12U rack as preinstalled in the cabinet |
| Cooling | 3 fans, temperature controlled. Air inlet and outlets are shielded. |
| Codes | Efore NCAGE number A061G. NSN code 5975-58-000-5906. |
| Dimensions (H x W x D), Weight | 1912 x 700 x 800 mm, 350 kg |
| ESSI battery cabinet | |
| Battery shelves | 3 pcs, 3x100 Ah |
| Battery fuses | 3 pcs, 1-pole switch fuse |
| Converter | 48 Vdc to 12 Vdc |
| Alarms | Switch fuse auxiliary contact, battery fuse alarm, converter fuse alarm |
| Codes | Efore NCAGE number A061G. NSN code 6160-58-000-6784 |
| Dimensions (H x W x D), Weight | 2002 x 600 x 600 mm, xx kg (without batteries) |



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Dimension drawings



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Order Information

| Systems | |
|--|--------------------|
| Description | Efore order number |
| ESSI System in EMP/HPM and IP54 protected cabinet, right hand, RS-232 filter | 9220X0003926 |
| ESSI System in EMP/HPM and IP54 protected cabinet, left hand, RS-232 filter | 9220X0003927 |
| ESSI System in EMP/HPM and IP54 protected cabinet, right hand, RS-485 filter | 9220X0003928 |
| ESSI System in EMP/HPM and IP54 protected cabinet, left hand, RS-485 filter | 9220X0003929 |
| ESSI System in IP54 protected cabinet | 9220X0005914 |
| ESSI battery cabinet | 9220X0003740 |
| ESSI 12U rack | 9220X0003698 |
| Spare parts | |
| Description | Efore order number |
| Rectifier, MRC 48-1600 | 92G340 |
| Converter 48 VDC to 24 VDC | 9060X0000681 |
| Converter 48 VDC to 12 VDC | 9060X0003623 |
| VIDI+ I/O controller | 94G910 |
| VIDI FCM, fan controller | 94H380 |
| Fan, 48 Vdc | 5500X0002996 |
| Temperature sensor | 94M268 |
| Batteries | |
| Description | Efore order number |
| Battery NSB 100FT RED | 5020X0004626 |
| Battery Powersafe 12V100FC | BDBJA60501 |
| Options | |
| Description | Efore order number |
| Inverter, EIM62134VF, 48 Vdc / 230 Vac, 1000 VA | 9060X0001152 |
| VIDI-SAM module | 94H610 |
| 230 Vac socket panel, backup with inverter | 5260X0003678 |



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