

## Remote Power System RPS

The ideal system to supply power to remote stand-alone communication equipment over the BRUpowermil cable, which allows data communication over fiber optic and power supply at the same time.

### Function:

The Remote Power System is a new, economical and durable solution for temporary power supply to remote transmitters or other communication equipment kilometers away. Thereby the remote mains voltage is 230/400 VAC in the capacity range of 1.6...2.0 kVA starting from an existing mains connection.

The solution is a time and cost saving alternative to conventional procedures of the current temporary supply by mobile generators, temporary power stations. The RPS can be installed rapidly and simply.

The RPS is produced in series for the Swiss Defense Forces and handed over to the troops for supplying mobile transmission locations at the same time with power and fiber optic data communications. Numerous further applications for civil and military use are in preparation for development. The units could be customized on specific applications.



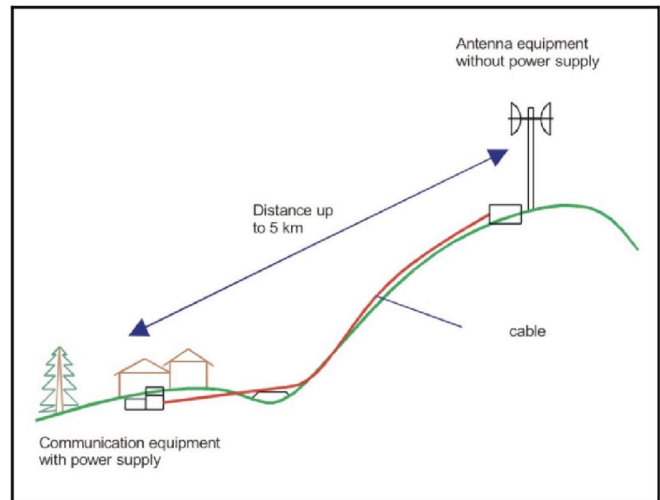
Primary and Secondary Power Station

### Crucial Advantages in the Employment

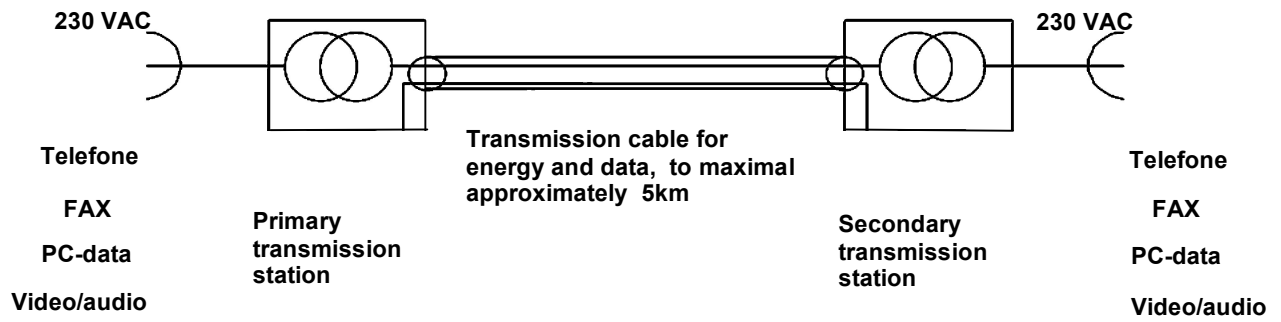
- High economy owing to smaller initial and operation costs
- Rapid availability of the current supply owing to simplest installation by personnel
- High mobility owing to small dimensions and limited weight (installation of the cable with e.g. back-pack frame or vehicle winding frame)
- Maintenance- and pollution free operation (no fuel supply and noise generation as with generators)
- Simple account of the current consumption (simple lead-sealable electric meters are available)
- High security against electrical accidents (all-insulated, EN-examined, CE certified)
- High reliability owing to durable, harsh-environment-suited execution (high mechanical firmness, weather-proof, simple maintenance)
- High working reliability (constantly regulated supply voltage, permanent system monitoring device)

### Operational Principle:

The one-phase supply voltage (230 VAC) is continuously regulated to the 1'000 VAC level and transmitted with very low loss of voltage, via the specially designed coaxial cable BRUpowermil between isolated primary and secondary transformers. Additional implemented four optical fibers enable simultaneous end-to-end signal transmissions, (e.g. Ethernet) for telephony, data transfer, video/audio, etc. via different standard interfaces.



Function Principle



**Operation principle**

**Technical Data:**

**Power Supply:**

Input voltage 230 VAC/50 Hz  
 ( $\pm 10\%$ ,  $\cos \phi \geq 0.8$ )  
 Transmission voltage 1000 VAC/50Hz  
 Output Voltage 1.6 kVA (1-phase)  
 Voltage Stabilized, same as input voltage

**Transmission Cable:**

Cable type Coaxial or fiber-optic hybrid cable with double insulation  
 Wires 2-wires  
 Wire cross-section 1.6 mm<sup>2</sup>

Transmission distance up to ~ 5 km  
 Isolating transformers protective insulation  
 Protecting class IP 54  
 Compliance SEV tested, CE  
 CE conformant

**Protective Measures:**

Personal protection SEV tested, CE conformant  
 Overload +cable breaks Permanent electronic system monitoring

**Dimensions:**

W/H/D 325 / 270 / 490 mm  
 Weight approx. 32 kg