

SmartHub Precision Controller

4th Generation Intelligent Power Controller & Site Monitor



The Silver Power Systems SmartHub Precision is an integrated, intelligent power system controller and site monitoring platform for comprehensive remote monitoring & management of power systems at telecoms network sites.

The SmartHub Precision forms the core of the SPS range of on-site power solutions, supporting both site monitoring and adaptive control of grid, generator, battery, fuel cell, solar and wind power system components from a single intelligent device.

The system supports a seamless and flexible upgrade of each site's power needs, from energy and fuel monitoring only, to phased addition of diesel-battery hybrids, solar PV and wind systems.

Site operation costs are reduced through control of the on-site power supply and/or generation equipment to effectively meet energy performance targets.

The SmartHub Precision supports a wide range of sensors and interfaces. Data backhaul is via an external IP communications modem to a shared or dedicated server

Key Product Features

- 4th generation, slim line, rack mounted smart power controller and site monitor
- Single, software upgradeable hardware platform:
 - Network Power Monitoring
 - Generator-Battery Hybrid Power
 - Renewable Energy Hybrid Power
 - Smart Grids (Energy Arbitrage, UPS Battery Management, EV Charging)
- Extensive monitoring and control of passive equipment; site access control & security systems, power infrastructure, air conditioning & cooling systems
- Built in webserver for installation, commissioning and local site maintenance
- Wide range of interface protocols to connect to other onsite equipment – supports a range of rectifiers, controllers and Li-ion battery systems BMSs from Delta, Eltek, DeepSea, Panasonic, LG and Saft
- Rapid installation and commissioning with plug & play connectors, built-in tests and software automated acceptance
- Supports extensive range of analog and digital sensors, with user configurable data reporting intervals
- Remote communication with SPS Manager in the network operations centre to provide network-wide remote power monitoring, control and management



Silver Power Systems Manager

Silver Power Systems Manager is a web based element management system providing real views of data collected and alarms reported from the Precision controller

- Network and Site views
- Tabular and graphical representation of site performance data
- Real-time Alarms and Events reporting
- Time stamped data collection for long term analysis and reporting
- Remote configuration of site controllers and connected systems
- API Interfaces (e.g. SNMP) to other Network Management Systems
- Over the air software updates

The Silver Power Systems Advantage

Working with leading brands in their respective sectors, the Silver Power Systems energy management platform is recognised as the leading equipment vendor agnostic, telecommunications power management solution.

Silver Power Systems' solutions have been installed in Europe, Asia, Africa and North America, with leading telecom operators, network providers and system integrators. They offer a highly configurable, reliable and cost effective, power control and monitoring solution, derived from 25 years' experience designing and providing off grid telecom power solutions in remote locations.

Parameter	Specification	
Dimensions	1U x 217 (W) x 214 (D) Weight: 4.5Kg	
Supply Voltage	24V to 48V DC nominal (19V DC min., 60V DC max.) Input protected against reverse polarity connection	
Power Consumption	3W quiescent (typical), 30W (max)	
Environmental	Storage Temperature Range -40 to +85°C Operating Temperature Range -20 to +50°C Operating Humidity Range 0 to 95% (non-condensing) Operating Altitude Range 0 to 3000m (70kPa) with no de-rating	
Communications	Automatic modem resetting mechanisms and up to 24hr local data storage Compressed data messaging, typically 55kb per hour	
Backhaul	LAN, SMS/GPRS/EDGE/HSPA (via appropriate external modem)	
Standards Compliance	Safety: IEC/EN 60950 EMC: EN 55022 and EN 61000-4 NEBS: GR-1089-CORE	
Optional Sensor Packs	Battery (DC current, battery temp, ambient temp) Diesel (fuel, genset control) Grid (AC presence, AC current) Security (access contactors, PIR, camera) Weather (temperature, insolation, wind)	
i/O Ports	21 x RJ-45 ports supporting multiple I/O configurations	
I/O Port Configuration	8 x 4 to 20mA analogue sensor inputs 2 x 0 to 60V analogue sensor inputs 8 x relay inputs 8 x relay outputs 8 x digital inputs	4 x PT100 temperature sensor inputs 1 x counter inputs 2 x RS485 ModBus / RS485 CANBus ports 5 x WAN/LAN Ethernet ports 1 x USB ports