



**High-Tech Electronic Solutions Ltd**

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## **Smart Power Distribution System (SPDS)**

The smart power distribution system is an integrated and intelligent power distribution solution for residential, commercial or industrial premises. The SPDS has several functions, but most important, it distributes power and communicates through the Internet. The access to the SPDS is achievable from anywhere, anytime using a standard internet browser. The data can be manipulated to produce valuable reports in a graphical format to identify consumption trends, security alerts and events reporting.

The power distribution part allows managed control and distribution of power to your devices from anywhere.

Power consumption data is collected from the digital meter unit automatically and stored on a secure central web server for further processing (billing process), the server is backed up daily for customer's safety and peace of mind.

The last responsibility of the SPDS is to act as a data acquisition system for some external critical signals, such as security alerts and status. This unit functionality keeps the building climate within a specified range, provides lighting based on an occupancy schedule, and monitors system performance and device failures and provides email and/or text notifications to building engineering staff.

In general the SPDS is designed to perform number of functions such functions are:

- Power supply distribution
- Power protection
- Remote meter reading
- Remote control and monitoring
- Energy management
- Programmable switching of usage devices
- Security activities

Since, the internet becomes the most cost-competitive way of remotely monitoring, managing and controlling media. The PSDS uses the internet as a reliable communications highway to deliver valuable meter reading data direct to your PC.

Each PSDS has an Internet connectivity, which allows it to communicate with a central web server for retrieving or updating central databases.

SPDS's software can be programmed to automatically upload meter readings and control command requested remotely from anywhere.

Users gain access via a secure username and password and gain access to the different systems they have. The user can create reports, generate graphs as well as export the data for the use in other applications.

The use of internet based data saving techniques means that data can be viewed from any computer, anywhere across the globe. This data will be securely held on fully backed up servers so clients can

access this data via the Web with full security, with pre-defined passwords per site or sites to be specified by the client.

Figure (1) shows a block diagram of the basic SPDS system configuration.

There is wide range of applications can benefit from the SPDS; examples of such applications are listed below:

- Automated climate
- Building Automation Systems
- HVAC and refrigeration
- Home Automation
- Security systems

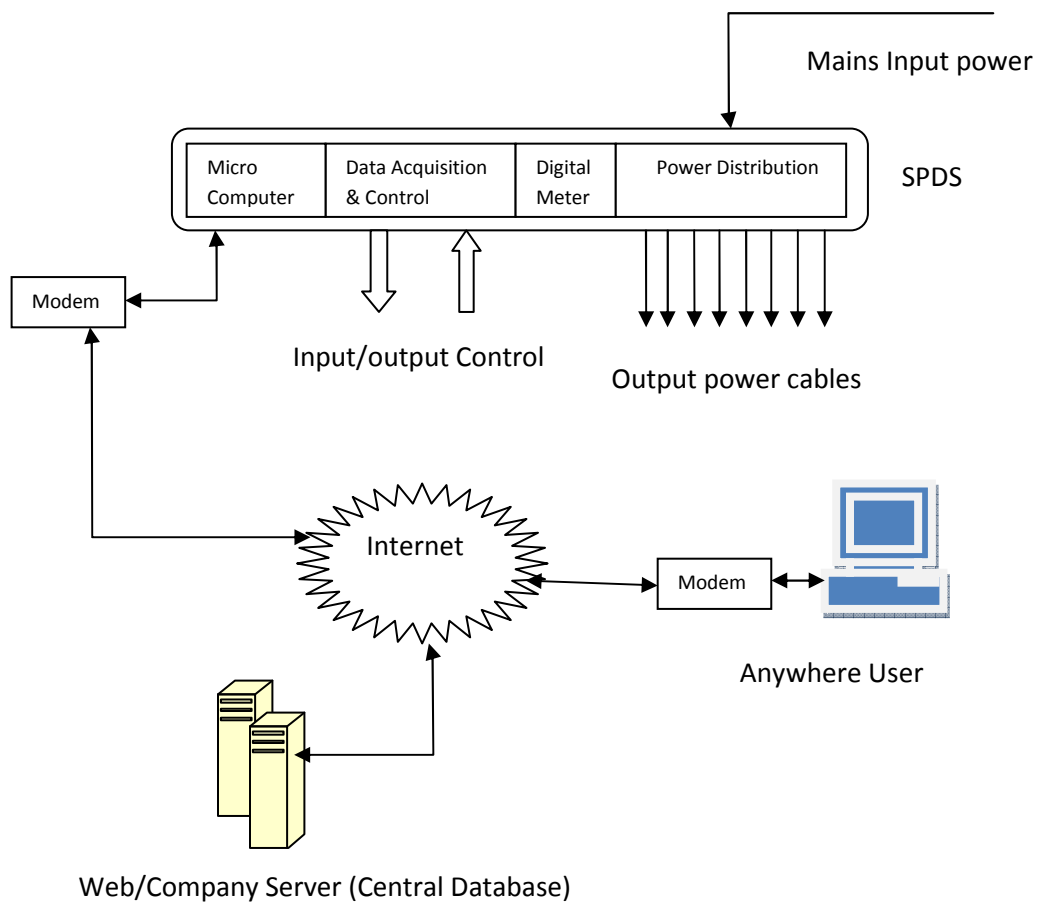


Figure (1) system configuration