

Direct Connect eXternal (DCX)

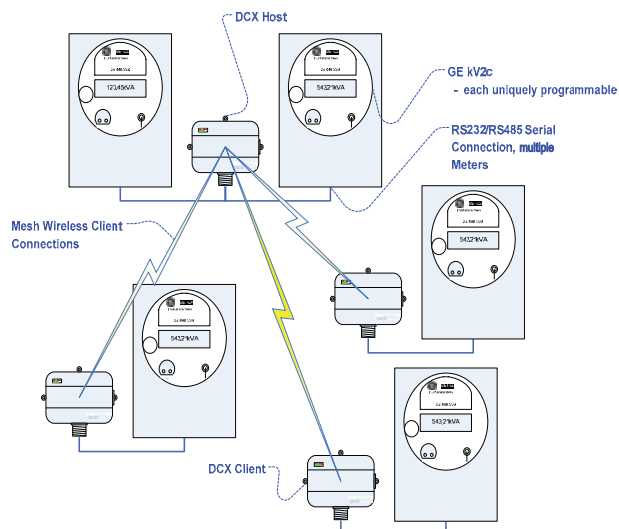
SmartSynch has developed the DCX (Direct Connect eXternal), a low-cost external interface that allows real-time communications with nearly any manufacturer's meter. Energy and demand registers, power quality and interval data can easily be requested and retrieved using two-way digital cellular or Ethernet connectivity. Each unit can be connected to multiple meters using RS232, RS485, Ethernet or wireless SmartLAN communications. This reduces the cost of hardware and monthly communication charges. The utility user can interrogate the meter directly using the utility owned MV-90 system or via the meter manufacturer's software.

At the core of the SmartSynch wireless solution is the DCX equipped with a SmartSynch SmartLAN radio. This unit serves as a host and is used to communicate with multiple SmartSynch wireless radios installed within range. Each SmartSynch wireless radio is IP addressable and serves as a repeater, thus extending the range of the entire network. Each unit is designed to meet the current 802.15.4 standards. For utility metering, the DCX features a SmartSynch wireless radio along with a cellular or Ethernet modem. This unit is the part of the system that moves data back to the utility over a WAN connection. SmartSynch wireless circuitry is then installed underglass of a commercial and industrial meter. Using MV-90 or the meter manufacturer's software, the utility can then retrieve real-time data from the meter.

The system is further enhanced by adding additional SmartSynch wireless units within meters that surround the DCX collector. Each SmartSynch wireless device allows for "hopping" of the radio signal via the SmartLAN network. The SmartSynch wireless system from SmartSynch is the first of its kind to allow full and open communications with end devices so that they can be read with industry-standard software such as MV-90.

SmartSynch wireless technology can be used in an array of applications, including electric, gas, steam, SCADA, stray voltage sensors, agricultural and industrial controls, etc. This hardware is modular and inexpensive and can be easily modified to integrate with any number of systems to provide real-time communications.

DCX Wireless SmartLAN System





DCX



Features & Functionality

Compact Size:

Mounts nearly anywhere

Weatherproof Enclosure:

Rugged UL approved, NEMA 3 rated

Flexible Communications:

Ethernet and digital cellular including Sprint, Nextel, Verizon or AT&T

Integrated SmartLAN Communications:

Read multiple meters with one modem

RS232/485 Communications:

Connect multiple meters via hard-wired connection

LED Indicators:

Visual indication of operations

Terminal Strip Connections:

Easy connectivity regardless of meter type

Direct Connect or Web Interface:

Read directly with MV-90 or custom web application

Low Cost:

Package includes modem, antenna, and enclosure

Specifications

Overall Dimensions

4.5" x 3.75" x 2.5"

Enclosure Material

Lexan 503R

Rating

NEMA 3, UL916

Temperature

-40° to +65° C

AC Input

85-305 VAC (2W Max)

Automatic Discovery of Clients

Built-in Watch Dog with Hardware Restart

Self-Registration on Cellular Network

About SmartSynch: Headquartered in Jackson, Miss., SmartSynch has been developing successful Smart Grid Intelligence solutions for the utility industry since 2000. The company's clean-tech innovations in the two-way delivery of real-time energy usage data over public wireless networks, in lieu of private network build-outs, have to date simplified AMI deployments for 75+ major North American utilities, while enabling green-energy initiatives and delivering significantly higher Returns on Resources.

Unlike proprietary, closed-architecture solutions, SmartSynch's products represent future-proof investments in technology. The standards-based IP connectivity enabled in every device deployed makes them adaptable and remotely upgradable to support today's sensor and communications needs, as well as tomorrow's opportunities, better than any alternative.