

Leverage existing substation monitoring equipment with an extensive collection of D20 substation controller communication solutions.

Master Station Communications

GE's communication protocol library enables a wide variety of master station applications.

Multi-Ported Substation Controller

- Use multiple communication ports to provide data to multiple masters using multiple protocols.
- Don't be limited to two or three master station connections. Communicate with as many master stations as you wish.

Provide connections for:

- Primary and backup masters
- Other T&D masters
- Regulatory bodies
- Neighboring utilities
- New master stations
- Large customers
- Redundant communication paths

- Custom map database points to each master station using different protocols. Shared data is identical. Each master can only see what is mapped to that master.

Front End Processor

- Multiple communication ports can integrate data at the control center from multiple field RTUs using multiple protocols.

Data Server Communication Protocols

- 8979
- ANSI® X3.28
- ASW
- BBC 7200
- BETAC 7020
- CDC® TYPE 1
- CDC TYPE II
- CEGELEC® HNZ
- CONITEL 200
- CONITEL 2000
- CONITEL 2020
- CONITEL 2025
- CONITEL 2100H
- CONITEL 2100M
- CONITEL 300

- CONITEL 3000
- DCP-1
- DNP V3.00
- ESCA®/WELCO
- GETAC® 7020
- GI-74
- HARRIS® 5000
- HARRIS 5500
- HARRIS 6000
- IBM® 3707
- IEC 60870-5-101
- IEC® 61850
- INDUCTIC 33
- INDUCTIC 35
- INDUCTIC 41
- MEGADATA® 3000
- MICRO II
- MODBUS®
- MPS-9000
- PERT 26
- PERT 31
- QEI
- QUICS I
- REDAC 70-H
- ROCKWELL®
- SANGAMO®
- SC1801
- SES®-91
- SES-92
- SINAUT® 8FW1024
- SINAUT 8FW-512
- TEJAS III
- TEJAS V
- TELEGYR® 6500
- TELEGYR 809
- TRW 9550
- TRW S-9000
- VANCOMM
- WISP+
- XA-21*
- and others...

Time Synchronization Options

Time sync your system using your choice of IRIG-B or Simple Network Time Protocol, SNTP.

File Transfer

Use Trivial File Transfer Protocol, TFTP, to transfer files over Ethernet or the local maintenance port.

Virtual Connection

A built-in terminal server emulator allows pass-through connections to be initiated to any substation IED (relay, meter, RTU or other device). Once the connection is established, make configuration changes or upload local event records from substation devices using their native PC configuration and maintenance tools.

Secure Remote Maintenance

Using your PC and the various user facilities that come with the D20 controller, you can easily and conveniently configure and maintain the D20 device locally or remotely via the maintenance port or Ethernet connection. Password and dial-back security ensures only authorized personnel calling from authorized locations can access the maintenance port.



IED Communications

The extensive D20 controller protocol library communicates with most substation devices.

Powerful Data Concentrator

- Multiple communication ports integrate data from multiple Intelligent Electrical Devices (IEDs) using multiple protocols.
- Significantly reduce required field wiring.
- Significantly increase available data.

Retrofit Existing SCADA Solutions

- Update existing substation control architectures without replacing existing IEDs.

Provide Best-in-Class Solutions

- Integrate data from best-in-class devices rather than compromising on an all-in-one solution.

IED Communication Protocols

- 8979
- ACCUSONIC® FLOW METER
- ANSI X3.28 DCA
- BECO 2200
- BOEING™ 3050
- CDC TYPE II
- CEGELEC HNZ
- COOPER 2179
- DNP V1.00
- DNP V3.00
- DPU®
- ENVIC DMCP-20A
- FLUKE TEMP RECORDER
- GE DGP*
- GEC COURIER
- GEC SCADA PACKET
- HARLEY LTC-MAP*
- HARRIS 5000
- HARRIS 5500
- HARRIS 6000
- HYDRAN 201*
- IEC 870-5-101
- IEC 870-5-103
- IEC 870-5-104
- INCOM™
- INDUCTIC 33
- JEM 2
- LEEDEX DTMF
- MD3000
- MICRO II
- MODBUS
- PML 3710 ACM METER
- PROCONTROL® P14
- PSR®
- PSI QUAD 4+
- QUANTUM® METER
- ROCKWELL
- RUGBY CLOCK
- SAG® PROTECTIVE DEVICE
- SC1801
- SEL® GATEWAY
- SINAUT 8-FW 512/1024
- SINAUT 8FW-512-PCM
- SPA BUS
- SUNDAS RMS
- VANCOMM
- and others...

Communication Health Monitoring

Provide status indications of which devices and/or individual points are on-line or off-line.

Monitor communication port statistics including framing errors, parity errors, overflow errors, breaks and timeouts via SCADA counters or the maintenance port.

Monitor the readiness state of the standby unit in redundant systems.

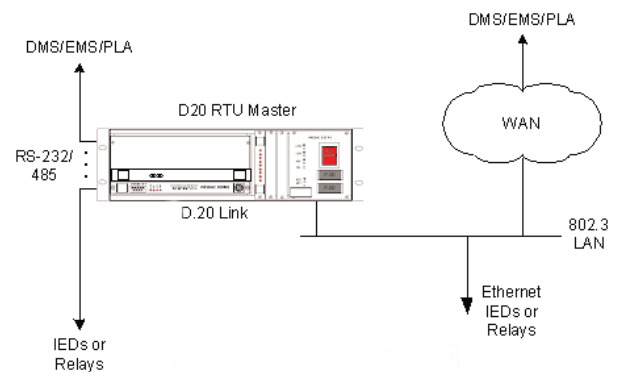
Redundant Communication Options

Use two physical communication channels (main and backup) where only one channel is normally supported by the end device. The Line Switch application automatically switches between channels on loss of carrier, timeout, or manual request.

Suppress status and analog values during maintenance or commissioning. The Substation Maintenance application reports either the last known value or a pre-configured value to the master while in maintenance mode, allowing technicians to perform maintenance on the system while the master station receives the desired data.

Support for Multiple Communication Media

D20 controller media support includes Ethernet, Wireless Ethernet, leased/dial-up telephone lines, modems, 900 MHz radio, spread spectrum radio, microwave, fiber optics, and others.



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