



RTS-DataPak™
Digital Remote Telemetry System

Self-contained digital cellular device provides cost-effective connection for remote telemetry/meter reading and other data application.

- ⚡⚡ Connectivity for meters and data devices with integrated modems or RS-232/RS-485 serial interfaces over CDMA, GSM, or TDMA cellular networks.
- ⚡⚡ No need to change data equipment or data acquisition software.
- ⚡⚡ Easy programming for digital service, automatic transceiver activation to prevent lockup.
- ⚡⚡ Remote diagnostics for ease of operation and maintenance.
- ⚡⚡ High-reliability autoranging power supply with 85 to 320-VAC input range.
- ⚡⚡ Optional battery backup and solar power options.
- ⚡⚡ NEMA 3R weatherproof metal enclosure with thermal shutoffs and stainless steel hardware.
- ⚡⚡ Fast and easy installation provides data transmission in digital cellular coverage area without the high cost of landline installation or change of data acquisition equipment.

The RTS-DataPak Remote Telemetry System provides fast network connectivity for automatic meter reading or data acquisition anywhere within digital cellular coverage areas. The RTS-DataPak can be used for remote reading of data such as power usage, load management, flow meters of gas transmission lines, status monitoring of remote data acquisition equipment and remote control of user equipment.

Modes of operation include both circuit-switched and packet data transmission. Circuit-switched capabilities are offered by several CDMA, GSM, and TDMA cellular carriers. This offers users an easy and affordable transition to digital cellular service without changing metering or data acquisition equipment or software.

RTS-DataPak units equipped with CDMA or GSM cellular transceivers are also capable of packet data transmission using CDMA 2000 or GPRS including EDGE (EGPRS) technologies, respectively. When using packet data, the TransTel Group Access Translation Device or similar equipment may be required with existing PSTN-based data center equipment.

Software embedded in the RTS-DataPak processor provides for easy and convenient programming of the cellular digital transceivers/modems. Online or remote status inquiries assist in easy operation and maintenance of the RTS-DataPak. Connection to metering equipment or other data equipment is available via RJ11 (**Model RTS-DataPak-M**) or RS-232 including RS-485 serial ports (**Model RTS-DataPak-S**).

The RTS-DataPak is supplied in a NEMA 3R enclosure proven in thousands of RTS-100 installations. The housing is only 11 inches high by 5.5 inches deep and 8 inches wide. The power supply is highly reliable and can be as large as 50 watts. An optional internal battery is available for backup operation.

The RTS-DataPak provides a total and cost-effective solution for remote data transmission with the convenience of cellular service.

RTS-DataPak Remote Telemetry System Specifications

<i>Transceiver/Modem</i>	CDMA: Sony Ericsson CM-42; GSM: Motorola G20-II or Sony Ericsson GR48; TDMA: Sony Ericsson DM15/DM-25. Other transceivers may be used depending on technical requirements, availability, operational parameters, and ease of use. TNC connector.
<i>User Interface</i>	RS-232 (DB9) setup port for programming and status inquiry. Access via PC or laptop communications program. Display of signal (RSSI), telephone number, and baud rate. LED to indicate idle, ring, and data transmission. Remote status inquiry from any landline via PC or laptop communications program. Serial Model RTS-DataPak-S: Switch to select RS-232 or RS-485. RS-232 data connection via barrier strip terminal block: SIGNAL GND, RX, TX, SHIELD. RS-485 connection via barrier strip terminal block: RX+, RX-, SHIELD RX, SHIELD TX, TX-, TX+. RS-485 termination switch. Data rate can be set to 2400, 4800, 9600, 19200, 38400, or 48000 kbp. Modem Model RTS-DataPak-M: RJ11 jack for data transmission via Hayes-compatible modems. Two-wire loop start, AutoSafe automatic transceiver reset in case of accidental shutdown. Ring voltage 20 Hz 200 V p-p. Dial tone 350 Hz/440 Hz square wave; maximum REN=5. Data rate self-adjusting to 300, 600, 1200 or 2400 baud. Mobile originated data calls to a maximum of three preprogrammed landline telephone numbers. Autoranging, input range 85 to 320 VAC, 120 to 277 VAC nominal; supply rated at 50, 30 or 20 watts as needed. Power consumption is 0.5 watts standby, 10 to 20 watts operational depending on transceiver/modem used. Self-clinching terminal block input, user replaceable fuses, varistors, RFI filtering and shielding, power indication LED, locking connectors, external ground lug. Battery charger; optional backup battery and mounting bracket; 24 hours standby, 2 hours operating.
<i>Power Supply</i>	Complete optional solar-powered assemblies for a variety of applications.
<i>Environmental</i>	NEMA 3R enclosure for outdoor and indoor use. -40F to 140F (-40C to 60C) operating, -40F to 176F (-40C to 80C) storage. 5 percent to 95 percent humidity, non-condensing. Thermal shutoff protection for transceiver/modem included.
<i>Mechanical</i>	Aluminum enclosure, size is 11 inches H x 8.5 inches W x 5 inches D. Weight is approx. 8 pounds. 3 Punch-outs for ½-inch conduit to accommodate electrical and telephone wires; securable stainless steel latch.

Ordering Information

All RTS units are supplied with integrated operating software and a NEMA 3R aluminum enclosure with stainless steel hardware.

Model RTS-DataPak-M/C Remote Telemetry System for data devices with integrated modems with CDMA transceiver.

Model RTS-DataPak-M/G Remote Telemetry System for data devices with integrated modems; GSM transceiver.

Model RTS-DataPak-M/T Remote Telemetry System for data devices with integrated modems; TDMA transceiver.

Model RTS-DataPak-S/C Remote Telemetry System for data devices with RS-232 or RS-485 serial ports; CDMA transceiver.

Model RTS-DataPak-S/G Remote Telemetry System for data devices with RS-232 or RS-485 serial ports; GSM transceiver.

Model RTS-DataPak-S/T Remote Telemetry System for data devices with RS-232 or RS-485 serial ports; TDMA transceiver.

Model RTS-DataPak-ATD/Y Upgrade of RTS-100-N3R analog units to digital service. Kit includes digital I/O board, transceiver and transceiver board, and necessary cables. Y = C for CDMA, Y = G for GSM, Y = T for TDMA service.

Model RTS-DataPak-SP/M(or S)/Y Solar-powered RTS-DataPak with all necessary mounting hardware. Y = C for CDMA, Y = G for GSM, Y = T for TDMA service.

Option RTS-BBU Rechargeable battery kit, mounting bracket, 12-VDC battery. Suitable for use with all RTS-DataPak models.

Option RTS-ACC Three-conductor, six-foot power cord.

Option UT-2.5 850 MHz, 2.5 dB gain omnidirectional antenna with TNC connector.

Option ME3 850 MHz, 3 dB gain omnidirectional antenna with 15 feet RG58 cable terminated with TNC connector.

Option ME5 850 MHz, 5-dB gain omnidirectional antenna with 15 feet RG58 cable terminated with TNC connector.

Option RTS-CAB Antenna bracket for 3 or 5-dB gain omnidirectional antenna.