

Operating Guide for RTS-DataPak-G and RTS-DataPak-G/S Circuit-Switched Data Transmission over GSM Networks

1. Service. The cellular carrier provides a SIM card to initiate service. While power is disconnected, install the SIM card in the SIM-card holder located under the ribbon cable between I/O and radio boards. Remove the ribbon cable to install the SIM card. Record data number and MIN (voice number). Connect antenna to TNC connector on outside bottom of chassis.

2. AC Power. Connect earth ground to external chassis ground lug. Connect external AC wiring to three-position terminal block in shielded bottom half of I/O board. Terminate three wires as indicated on metal shield. Conductors are usually identified as follows:

Line or Phase 1, black or brown wire

Neutral or Phase 2, white or blue wire

Ground, green or green/yellow wire

Activate external AC source (85 to 320 V). Red AC Power LED on. After a few seconds, the letter **P** (all systems pass) is displayed. Green LED (DC PWR/MON) in steady bright/dim mode denotes standby/cellular idle. Rapid blinking, 2 sec on, 4 sec off, indicates ring alert, irregular rapid blinking shows data transmission.

3. Display. Depress SW2 once for signal strength. Adequate signal is indicated by numbers smaller than 90 (90 = -90 dBm).

Depress SW2 twice to display the programmed data number. If a serial unit is used (RTS-DataPak-G/S), depressing SW2 a 3rd time displays the baud rate, typically 9,600 baud. If a modem unit is used, depressing SW2 a 3rd time will turn the display off. After a few minutes, the display is also automatically turned off.

4. Programming. Use Hyper Terminal of Windows PC or laptop (8 N 1 and 9,600 baud) to connect to the DB9 setup port of the RTS-DataPak. Pressing ENTER, returns DATAPAK prompt. Typing HELP, will show available commands, e. g. HELP, STATUS, PROGRAM, RESET, CELL, DEVICE, TEMP, RSSI, BAT. Type PROGRAM and press ENTER. Follow screen prompts and, if required, enter data number, MIN, and up to THREE DIAL HOME NUMBERS for mobile-originated calls. Type STATUS to display IMEI, MIN, data number, device baud rate (for serial units), RSSI, temperature, and battery voltage (if applicable). When programming is finished, disconnect from the setup serial port.

5. Remote Diagnostics. Obtain operating status by calling the RTS-DataPak from a PSTN-based PC or laptop equipped with a modem via a communications program such as HyperTerminal. When connected, hold down SHIFT and press 1, 2, 3, 4, 5, 6. The reply indicates modem or serial version, IMEI, MIN, data number, baud rate, RSSI, temperature, and battery voltage (if applicable).

6. Operation. If the RTS-DataPak-G series (modem version) is used, connect the metering device to the RJ11 jack. If RTS-DataPak-G/S series (serial version) is used, connect the metering device to the RS-232 or RS-485 terminal strip as applicable. In case of power failure or if the transceiver shuts down, the AutoSafe feature will reset the transceiver to its programmed parameters when power returns.

7. Battery. For 12-VDC operation use the RTS-BBU or other suitable battery. Connect to 4-pin connector at top of I/O board. To prevent sulfurization of the battery, the cellular transceiver is shut down when the battery voltage drops below 10.7 volts. When a fresh battery is installed, press SW1 or apply AC power at the AC power input section to reset the RTS-DataPak.

8. Additional Information. See Technical Support at www.transtelgroup.com.

