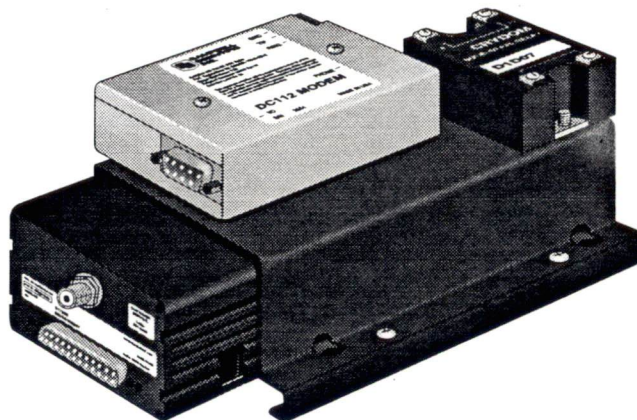


Cellular Telephone Package for remote datalogger sites in the U.S.A.

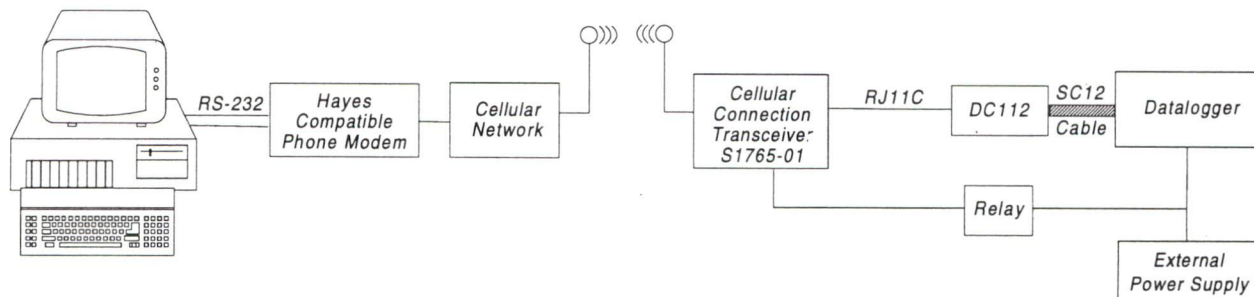
A cellular Motorola transceiver and a Campbell Scientific DC112 modem are used to communicate between a Campbell datalogger and base station computer. Cellular telephones are a convenient telecommunication alternative for mobile applications or for locations where ordinary phone lines aren't established and are too costly to implement. Unlike RF systems, cellular phones do not require an FCC-assigned RF frequency, or the set up and maintenance of the RF/repeater stations. Please note that locations near heavy construction sights, tunnels, or power lines may be unsuitable for cellular communication.

To conserve power, a relay is used to switch power to the phone at pre-determined time intervals. Where pre-determined call intervals are short and infrequent (e.g., 10 minutes per day), the system can be powered by the PS12LA or BDR320-C's sealed rechargeable batteries supplemented by a charging source (AC power or solar panel).* For longer calls or more frequent time intervals (e.g., 10 minutes every hour), a deep-cycle RV battery trickle-charged by AC power or a solar panel can power the system. When communication between the datalogger and the computer must be continuously available, the relay is not used and AC power is required. If temporary cellular voice communications are required during a site visit, any analog phone may be connected to the DC1765 via an RJ11C cable.



DC1765 Cellular Transceiver. Cabling not shown.

Network Requirements



- IBM-compatible computer with PC208 software
- RS-232 serial cable (SC25PS or equivalent)
- Hayes-compatible phone modem (1200 or 2400 baud recommended)
- Subscription to a cellular network with coverage at the datalogger site
- DC1765 Cellular Telephone Package (includes a Motorola S1765-01 cellular connection transceiver, RJ11C cable, DC112 Modem, SC12 cable, relay, and mounting bracket for enclosure backplate)
- Datalogger (CR10, 21XL, CR7, or BDR320-C)
- Environmental enclosure (ENC 12/14 or 16/18)
- Power Supply
- Site-specific antenna and cable*



CAMPBELL SCIENTIFIC, INC.

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DC1765 Cellular Telephone Package Specifications

S1765-01 Dimensions:	2 x 3.5 x 8.5 in., 5.1 x 8.9 x 21.6 cm
DC112 Dimensions:	4.4 x 3.0 x 1.0 in., 11.2 x 7.6 x 2.5 cm
Temperature Range:	-25 to +50°C
Average Current Drain:	0.38 A quiescent 2.15 A active
S1765-01 Voltage:	10.9 to 16.3 VDC
DC112 Voltage:	5 VDC from datalogger
DC112 Baud Rate:	300, 1200

*Please contact a Campbell Scientific Application Engineer to determine the best power supply and antenna for your application. To receive additional information on analyzing your system's power requirements, request a copy of Campbell Scientific's Power Supply brochure or application note.



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