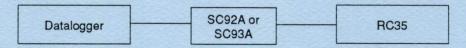
Data Retrieval via Cassette Tape

Tape-based data retrieval provides a method of data transfer between a Campbell Scientific datalogger (CR10, 21X, or CR7) and a computer. The tape recorder is either left at the datalogger site for continuous data transfer or is taken to the site for data download. The resulting data file is then transferred to a computer. With special PROMs, datalogger programs can be transferred between the datalogger and cassette tape.

(Tape recorders only operate at temperatures between +5° and +40°C.)

Data Transfer - Datalogger to Cassette Tape

Data is dumped automatically or manually to the RC35 Cassette Recorder. Up to 180K data points can be stored on one side of a C-60 cassette tape. The SC92A Write Only Interface transfers data from datalogger to tape; the SC93A Read/Write Interface transfers data and programs in both directions. The SC93A requires a Library Special PROM in the datalogger. Older dataloggers may already contain the necessary PROM.



Data Transfer - Cassette Tape to Computer

Data tapes generated by the datalogger are read by the PC201 Clock-SIO Tape Read Card & Software or by the C20 Cassette Interface. The PC201 is recommended for IBM-PC or compatible computers with a full-size, industry-standard slot. The C20 is for non-IBM compatible computers with RS-232 ports.

For IBM or Compatible Computers

An RC35 or RC35P* Tape Recorder is required at the computer. A PC201 Card connects the recorder to the computer via a supplied patch cord. The PC201 contains an Asynchronous Communications Adapter that can be configured as COM 1, 2, 3, or 4, thereby adding an additional serial port to your computer. An accompanying software diskette contains software for tape read/write and clock functions. PC208 Datalogger Support Software is recommended for data manipulation.



For Non-IBM Compatible Computers

The C20 Interface decodes and transmits ASCII or binary data to any external device that communicates via a standard RS-232 interface. The user must write a simple computer program to download data. Baud rate, format selection, parity, protocol determination, and port configuration are controlled through switches on the C20's front panel. Equipped with two RS-232 ports, the C20 can also transmit data between a terminal and a mainframe computer.



*Model RC35P Playback Recorder includes a charger for powering the recorder during playback.



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Specifications

RC35/RC35P Recorder

- Power (during recording): 6 VDC from datalogger through SC92A/SC93A during data transfer
- · Power supply (during play, rewind, fast forward):
 - 4 AA batteries
 - 120 VAC/6 VDC adapter (for RC35P only)
- · Current drain while recording: 200 mA typically/5 sec 300 mA maximum
- · External inputs:
 - Mic., Remote, Ear, DC In
- Operating temperature range: +5 to +40°C

- Tape format
 - Recommended tape length:
 - C-60
 - Recommended tape:
 - normal bias high quality (e.g., TDK, Maxell)
- · Size:
 - 6.9" W x 3.75" H x 1.63" D
- Weight (w/ batteries):
 - 1.7 lbs. (RC35); 2.1 lbs. (RC35P)
- RC35/RC35P shipped with:
 - (1) SC235P Cassette Patch Cord (RC35P
 - (1) C-60 Cassette Tape
 - (4) AA batteries
 - (1) AC Adapter (RC35P only)

PC201 Clock-SIO Tape Read Card & Software for IBM-PC

- Requirements:
 - IBM PC/XT/AT or PS/2 Model 30, or
 - 100% compatible
 - PC-DOS or MS-DOS Ver. 2.1 or greater
 - Minimum 256K bytes of RAM
 - Two floppy disk drives or one floppy and a hard disk
 - 115K bytes disk space used when PC201 installed
 - One full length industry-standard slot
- Suggested accessory:
 - PC208 Datalogger Support Software

- Weight: 1 lb.
- PC201 Card shipped with:
 - (1) Card guide
 - (2) AAA batteries
 - (1) SC235P Cassette Patch Cord
 - (1) SC225 34-Pin Rectangular Socket to 25-Pin "D" cable
 - (1) 51/4" 360 Kb diskette: 31/2" 720 Kb disk available if requested
 - at time of order (1) Operator's Manual

C20 Cassette Interface

- Tape read rate (w/high density format): 512 data points/block; 1 block/5 sec.
- Tape storage (w/high density format): 179K data points C-60 tape side
- Maximum burst error correction capability: 16 consecutive (0.2" of tape)
- 110, 300, 600, 1200, 2400, 4800, 9600, 19200
- · Port configuration: (2) RS-232

- · Power requirements:
 - 120/240 VAC 47-63 Hz.,
 - 16 watts typical
- · Size:
 - 9.0" D x 8.2" W x 5.5" H
- · Weight:
 - 7 lbs.
- · C20 shipped with:
 - (1) SC25PS RS-232 Ribbon Cable w/Pins to Pins/Socket
 - (1) SC235P Cassette Patch Cord
 - (1) Operator's Manual



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FAX 801-752-3268