SC929 RS232 Interface

The SC929 is used to temporarily connect a portable PC to a PC to a datalogger in a remote situation for the Purposes of data collection or datalogger reconfiguration.

1. Specifications

Operating temperature:	-25°C to +50°C
Power:	Powered by datalogger; current consumption typically 8mA
Connections:	9-pin male; connects to datalogger 9-pin female; configured as DCE, connects to AT-type portable PC
Length:	2m cable fitted with two 9-pin 'D' connectors
Weight:	225g

CAUTION The SC929 is not suitable for permanent installation – use ONLY with battery-powered PCs

2. Connections

2.1 9-Pin Female

The SC929 9-pin female port is configured as Data Communications Equipment (DCE) for direct connection to AT-type portable PCs.

2.2 9-Pin Male

The SC929 9-pin male port connects directly to the datalogger I/O port.

Table 1, overleaf, gives pin descriptions for both SC929 ports.

Table 1 SC929 Connector Descriptions

9-Pin Male Connector			9-Pin Female Connector		
Pin #	I/O	Description	Pin #	I/O	Description
1	IN	+5V	1	OUT	DCD*
2		GROUND	2	OUT	RX
3	OUT	RING	3	IN	TX
4	OUT	RX	4	IN	DTR
5	IN	ME	5		GROUND
6		N/C	6	OUT	DSR*
7		N/C	7		N/C
8		N/C	8	OUT	CTS*
9	IN	TX	9		N/C

* Connected internally to DTR

3. Application

The function of the SC929 is to convert datalogger logic to true RS232 logic and vice versa. It can be used where a portable PC is taken to a datalogger in a remote situation such as an automatic weather station. In these cases it provides a neat, single-cable alternative where an SC12 cable, an SC25AT cable and an SC32A Interface would otherwise be required.

NOTE   There are some significant differences between the SC929 and the SC32A. These are listed below:

a.   The SC929 does *not* provide the opto-isolation of the SC32A. To prevent ground loops, do not use the SC929 with PCs powered from the AC mains or other ground-referenced power supplies .

b.   Unlike the SC32A the SC929 consumes a significant level of power from the datalogger. To avoid unnecessary power drain disconnect the SC929 from the datalogger when it is not in use.

c.   The SC929 does not have the jumper option that is available with the SC32A and in certain situations odd characters may appear on the PC screen. However, this will not affect the correct operation of Campbell Scientific software.