

Comparison Table for Larger Dataloggers

FEATURE	CR3000	CR5000	CR9000X (see note 1)
Max. Scan Rate (Hz)	100	1667	100,000
Analog Inputs	28 SE or 14 diff	40 SE or 20 diff	28 SE or 14 diff per CR9050, CR9051E, or CR9055(E)
Pulse Counters	4	2	12 per CR9071
Switched Excitation Channels	4 voltage 3 current	4 voltage 4 current	10 voltage per CR9060
Digital Ports (see note 2)	3 SDM, 8 I/Os or 4 RS-232 COM (see note 3)	8 I/Os 1 SDM	1 SDM; 8 outputs per CR9060 or 16 I/Os per CR9070
Continuous Analog Outputs	2	2	6 per CR9060
Communications/ Data Storage Ports	1 CS I/O 1 RS-232 1 Parallel Peripheral	1 CS I/O 1 RS-232	1 CS I/O 1 RS-232 1 10baseT/100baseT
Input Voltage Range (Vdc)	±5	±5	±5 w/CR9050 or CR9051E, ±50 w/CR9055(E), ±60 w/CR9058E
Analog Voltage Accuracy	±(0.04% of reading +offset), 0° to 40°C	±0.05% FSR, 0° to 40°C	±(0.07% of reading + 4 A/D counts), -25° to +50°C
Analog Resolution	to 0.33 µV	to 0.33 µV	to 0.76 µV
A/D Bits	16	16	16
Temperature Range (°C)	-25 to +50 (standard) -40 to +85 (extended)	-25 to +50 (standard) -40 to +85 (extended)	-25 to +50 (standard) -40 to +70 (extended)
Memory (bytes)	2 M Flash for operating system 4 M for CPU usage, program storage, and data storage	128 k program 2 M data storage	128 k program 128 M data storage
Power Requirements (Vdc)	10 to 16	11 to 16	9.6 to 15
Typical Current Drain (mA)	2 (sleep mode) 3 (1 Hz sample rate) 10 (100 Hz sample rate)	1.5 (sleep mode) 4.5 (1 Hz sample rate) 200 (5 kHz sample rate)	750 to 1000 (processing) 750 to 4000 (analog meas.)
Dimensions (inches)	9.5 x 7.0 x 3.8	9.8 x 8.3 x 4.5	15.75 x 9.75 x 8 (lab enclosure) 18 x 13.5 x 9 (field enclosure) 10 x 11 x 9 (CR9000XC)
Weight (lbs)	10.7 (rechargeable battery) 8.3 (alkaline battery) 3.6 (w/o battery)	12.2 (w/battery) 4.5 (w/o battery)	~30 (lab enclosure) ~40 (field enclosure) ~27 (CR9000XC)
SDI-12 Supported	yes	yes	no
PAKBus Supported	yes	no	no
Modbus Supported	yes	no	no
DNP3 Supported	yes	no	no
CE Compliant	yes	yes	yes
Warranty	3 year	3 year	3 year
Software Supported			
Short Cut	yes	yes	no
PC200W	yes	yes	no
PC400	1.3 or higher	1.0 or higher	1.0 or higherr
LoggerNet	3.2 or higher	2.0 or higher	2.0 or higher
RTDAQ	yes	yes	yes
PCconnect	3.2 or higher	no	no
PCconnectCE	2.1 or higher	no	no

Notes:

1. For the CR9000X, the current drain, weights, and specific number of input/output channels depend on the I/O modules chosen.
2. Certain digital ports can be used to count switch closures.
3. For the CR3000, the I/O ports can be paired as transmit and receive for measuring smart serial sensors.
4. We recommend you confirm system configuration and critical specifications with Campbell Scientific before purchase.