

195-704-B 4-channel Analog Data Logger

The **195-704-B 4-Channel Analog Data Logger** records up to 1.9 million measurements with 16-bit resolution. The LCD screen displays readings from all four inputs, logging status, battery status, and memory consumption.

The logger calculates minimum, maximum, average, and standard deviation statistics. Stored data is uploaded to your PC or Mac via USB using HOBOWare® software (free download). HOBOWare® and HOBOWare Pro® provide graphing and data export features, as well as logger setup and launch.

A variety of sensors with voltage or mA output are supported. The logger can provide 2.5V to power low-current sensors; other sensors will require a separate power supply. Some common parameters that can be read by the logger are pressure, temperature, evaporation pan level, solar radiation, wind speed and wind direction.



Features

- Simple setup and launch
- USB download to your laptop
- Large display with status indicators
- Programmable start/stop modes
- 1 year typical battery life



195-704-B
4-Channel Data Logger

195-704N-B Logger with NEMA enclosure

Analog Channels	4 high resolution(16-bit) channels, 0 to 2.5 Volt 1 internal battery monitor channel
Memory	4 MB (1.9 million measurements, maximum)
Logging Rate	1 second to 18 hours, 12 minutes, 15 seconds
Logging Mode	Normal, burst, or statistics
Sensor excitation	2.5 Volts, 4 mA total. Excitation 5 mS before sensor reading begins.
Battery type	Two AAA 1.5 V alkaline batteries, user replaceable
Clock	± 1 minute per month at 25°C (77°F)
Communications	USB 2.0 interface
Operating Range	Logging: -20° to 70°C (-4° to 158°F); 0 to 95% RH (non-condensing) Launch/Readout: 0° to 50°C (32° to 122°F) per USB specification
Size	195-704-B 4.25 x 2.13 x 1 in. (10.8 x 5.41 x 2.54 cm) 195-704N-B 5.12 x 5.88 x 2.95 in. (13.0 x 15.0 x 7.5 cm)
	The CE Marking identifies this product as complying with all relevant directives in the European Union (EU).

Ordering Information

195-704-B	4-Channel Data Logger. 2 AAA batteries included. Cables not included.
195-704N-B	4-Channel Data Logger in NEMA Enclosure with clear cover. 2 AAA batteries included. Cables not included.
195-CABLE-2.5	Voltage Input Cable 2.5mm (order one per channel)
195-BHW-KIT	HOBOWare® for PC/Mac on CD, 6' USB cable
195-BHW	HOBOWare Pro® for PC/Mac on CD, 3' USB cable

Logger

Operating Range	Logging: -20° to 70°C (-4° to 158°F); 0 to 95% RH (non-condensing); Launch/Readout: 0° to 50°C (32° to 122°F) per USB specification
Logging Rate	1 second to 18 hours, 12 minutes, 15 seconds
Logging Modes	Fixed interval (normal), burst, or statistics
Memory Modes	Wrap when full or stop when full
Start Modes	Immediate, push button, date & time, or next interval
Stop Modes	When memory full, push button, or date & time
Restart Mode	Push button
Time Accuracy	±1 minute per month at 25°C (77°F), see Plot A
Power Source	Two AAA 1.5 V alkaline batteries, user replaceable, and USB cable
Battery Life	1 year, typical with logging rate of 1 minute and sampling interval of 15 seconds or greater
Memory	4 MB (1.9 million measurements, maximum)
Download Type	USB 2.0 interface
Full Memory Download Time	Approximately 1.5 minutes
LCD	LCD is visible from 0° to 50°C (32° to 122°F); the LCD may react slowly or go blank in temperatures outside this range
Size	10.8 x 5.41 x 2.54 cm (4.25 x 2.13 x 1 in.)
Weight	107.5 g (3.79 oz)
Environmental Rating	IP50
CE	The CE Marking identifies this product as complying with all relevant directives in the European Union (EU).

Note: The HOBO U-Shuttle (U-DT-1) is not compatible with this logger.