

3645-20 VOLTAGE LOGGER

LOGGER



Multi-range VOLTAGE LOGGER with Preheat Signal Function

Record Output from Sensors and Measuring Instruments



- Records output of sensors requiring preheating
- Analog output recording of measuring instruments
- One unit can handle a variety of outputs (Ranges from DC 50 mV, 500 mV, 5V, 50 V)
- Compact and lightweight (130 g)
- High-capacity recording (32,000 data points)
- Flexible recording intervals of 15 steps from 1 second to 60 minutes
- View recording data graphically on a PC
- Protects data during battery discharge and replacement



- Analog output recording of measuring instruments



- For recording output of water level sensors



ISO14001
JQA-E-90091



<http://www.hioki.co.jp/>

HIOKI company overview, new products, environmental considerations and other information are available on our website.

■ 3645-20 VOLTAGE LOGGER Specifications

Sensor types	Any sensor (power control function for sensors)
Input	Voltage (Input impedance: Approx. 500 kΩ)
Measuring range	±50.00mV / ±500.0mV / ±5.000V / ±50.00V
Input over range	"-----" Display
Measurement accuracy	±0.5%rdg, ±5dgt.
Temperature coefficient	(±0.02%rdg, ±1.5dgt.) / °C
Guaranteed accuracy range / period	23°C ±5°C for one year
Display	Measurement Value Display, Recording Status (Recording/Reserved Time Wait), Recording Intervals, Battery Status (Battery Residual Power: 4 Levels)
Recording intervals	1/2/5/10/15/20/30 seconds, 1/2/5/19/15/20/30/60 minutes * Settings for recording intervals shorter than the preheat time are not possible.
Recording data count	32000 Data × 1 ch
Recording start	Manual Start, Reserved Time Start
Recording end	Manual Stop, Memory Full
Recording method	One-time recording: Stopped when memory is full. Endless recording: Old data is overwritten when memory is full.
Preheat signal	Open drain output (Preheating: FET is ON) 30 V, 20 mA MAX
Preheat time	OFF/0.5/1/2/5/10/30/60 seconds * Settings for preheat times longer than the recording intervals are not possible.
Contents of settings	Operations using the unit key: Recording intervals, preheat time, manual start, manual stop, range Operations from a PC application: Current time, recording intervals, preheat time, recording start, recording method, comments, range, power conservation function ON/OFF
Back-up	Backs up data
Interface	Optical communication using infrared light, requires a separate 3911 COMMUNICATION BASE
Power supply / Maximum rated power	AAA-size alkaline batteries (LR03) × 4/0.1 VA
Continuous use time	Approx. 1 Year (When recording at one-minute intervals, preheat is OFF, power conservation function is ON and temperature is 20°C.) Approx. 140 Days (When recording at one-minute intervals, preheat is 5 seconds, power conservation function is OFF and temperature is 20°C.) Approx. 20 days (when recording at one-minute intervals, power conservation function is OFF and temperature is 20°C.)
Dimensions, mass	Approx. 57.5W × 86.5H × 30.0D mm (2.26W × 3.41H × 1.18D in) (not including protrusions) / Approx. 130 g (4.6 oz) (including batteries)
Operating temperature and humidity	0 to 40°C, 80% rh (there must be no condensation)
Accessories	AAA-size alkaline batteries (LR03) × 4, Operation Manual, 9632 CONNECTION CABLE (1 m for output, 9639 CONNECTION CORD (3 m for input)
Optional	3911 COMMUNICATION BASE

Model 3645-20 VOLTAGE LOGGER

■ Options

3911-20 COMMUNICATION BASE

9632 CONNECTION CABLE (for input, 1m)

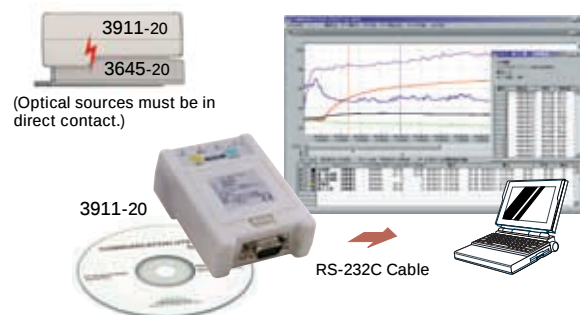
9639 CONNECTION CORD (for output, 3m)

9637 RS-232C CABLE (9-pin to 9-pin crossover, 1.8 m)

9638 RS-232C CABLE (9-pin to 25-pin crossover, 1.8 m)

Data Analysis and Processing on a PC

Use the 3911-20 COMMUNICATIONS BASE to transfer data to a PC. 16,000 data points are handled on 16 channels, 32,000 data points are handled on 8 channels to transmit to a PC for analysis and processing.



(Optical sources must be in direct contact.)

Settings made by communications software: Current time, recording intervals, preheat time, recording start, recording type, comments, range switch

■ 3911-20 COMMUNICATION BASE Specifications

Recording Capacity	Max. 16,000 data points × 16 Ch/ 32,000 data points × 8 Ch
Communications method	VOLTAGE LOGGER to 3911-20 Infrared Optical Communications 3911-20 to PC RS232C
Power Supply	AAA-size alkaline batteries (LR03) × 4
Dimensions, mass	Approx. 69W × 92H × 36D mm (2.72W × 3.62H × 1.42D in) / Approx. 150 g (5.3 oz)
Accessories	PC communications software
Compatible OS	Windows95/98/NT4.0/Me (for DOS/V, PC98)

● Use

Records output of sensors requiring preheating
Records output of sensors requiring preheating such as water level sensors and agronomic sensors. Combining with the 3631-20 TEMPERATURE LOGGER, the 3639-20 PULSE LOGGER or the 3640-20 LUX LOGGER enables the easy creation of agricultural and civil engineering related databases with this compact logger series.

One unit can handle a variety of outputs
Handles recording of a wide variety of output from high sensitivity low-output sensors of several mV such as light sensors, to output of 50 V.2

Analog output recording of measuring instruments
For recording output of analog output measuring instruments such as the 3284 CLAMP-ON AC/DC HiTESTER and the 3403 TACHO HiTESTER.

● Abundant variations, Compact logger series

A variety of credit card-size compact loggers is features multiple types of instrumentation (including as a voltage logger with preheating) and allows recording of temperature and humidity, various types of current, voltage pulses, and illumination levels. These powerful handy devices allow recording of large volumes of data (16,000 or 32,000 data points), provide recording intervals that can be set in 15 steps from 1 second to 60 minutes, and are equipped with data backup to protect against data loss when batteries are exhausted or being replaced. Get the benefits of ease of use and reliability, both in compact package.

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