

Complete with LCD for Checking Data and Making Settings in the Field

USB Interface for Connecting the Data Logger Series to a PC



3632-20 TEMPERATURE LOGGER Waterproof with built-in sensor -20.0°C to 70.0°C



3633-20 TEMPERATURE LOGGER Separate external sensor -40.0°C to 180.0°C



3634-20 INSTRUMENTATION LOGGER For measuring typical instrumentation signals DC 20.00 mA



3635-24/-25/-26 VOLTAGE LOGGER -24: DC ± 500.0 mV -25: DC \pm 5.000 V -26: DC ± 50.00 V



3636-20 CLAMP LOGGER For measuring alternating current on two channels 50.00/500.0 A AC (clamp sensor sold separately)



3637-20 AC VOLTAGE LOGGER AC 600.0 V



3638-20 LEAK LOGGER For measuring leak current on two channels 100.0 mA/1000 mA AC (clamp sensor sold separately)



3639-20 PULSE LOGGER For cumulative pulse measurement for a precipitation gauges, flow gauge, etc.



3640-20 LUX LOGGER 2000 lx to 200000 lx



For illumination measurement

3641-20 HUMIDITY LOGGER Alternates recording of temperature and humidity on two channels -40°C to 85.0°C 0.0%rh to 100.0%rh

3645-20 VOLTAGE LOGGER With preheat function $DC \pm 50.00 \text{ mV}$ to $\pm 50.00 \text{ V}$





Compatible with the USB 1.1 interface Equipped with an LCD display that makes it easy to check collected data and change settings in the field

Improved reliability in data retention Does not consume battery power while connected to a PC





ISO14001 JQA-E-90091

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

- Clock backup when battery needs replacement (approximately 12 hours)
- Same easy-to-use interface, like the current 3911-20
- Integrates with PC software for the 3911-20 (Operates with both the 3911-20 and the 3912-20)

Select Either USB or the RS-232C as the PC Communication Interface for the Data Logger Series

The USB-compatible 3912-20 has been added as a communication base for the flexible Data Logger Series of compact loggers for measuring information such as temperature, humidity, instrument signals, load current, leak current, voltage, pulse signals, and illumination. There are now two types of communication bases (which are used to download data recorded by a Data Logger to a PC) for the Data

Function Specifications

Display	Dot matrix LCD $(128 \times 64 \text{ dots})$	
Communication combinations	$PC \rightarrow 3912-20$	Clock, recording interval, start control, recording method, comment
	$\textbf{3912-20} \rightarrow \textbf{PC}$	Collected data (16 channels maximum: 256,000 data elements maximum)
	$\textbf{3912-20} \rightarrow \textbf{Logger}$	Clock, recording interval, start control, recording method, comment
	$Logger \rightarrow 3912\text{-}20$	Collected data (16,000 data elements maximum)
Communication method	3912-20 ⇔ Logger	Infrared optical communications (synchronous serial communications, three lines)
	3912-20 ⇔ PC	USB 1.1 (full speed: 12 Mbps)
Communication speed	3912-20 ⇔ Logger 3912-20 ⇔ PC	Approximately 250 data elements/second (reference value) Approximately 16,000 data elements/second (reference value)
Cable	USB cable (provided, approximately 1m)	
Recording capacity	16 channels maximum (16,000 data elements maximum × 16 channels)	

General Specifications

• Backup: Yes (Prevents loss of stored data during battery replacement; clock is backed up by a two-layer capacitor for approximately 12 hours) (reference value) Battery life: Approximately 3 months or more (when idle)

• Communication: Approximately 50 times (sending 16,000 data elements × 16 channels from Data Logger \rightarrow 3912-20 \rightarrow PC) \bullet Power supply: 1.5V batteries \times

- 4 alkaline dry cells (LR03) Maximum rated power: 0.4 VA
- Dimensions: Approx. W68.5 mm (2.70 ") × H128 mm (5.04 ") × D36 mm
- (1.42 ") (expluding protrusions) Mass: 180g(6.35 oz.) (including batteries) • Locations for use: Indoors, at altitudes of up to 2000 m (6562 -ft.)
- Operating temperature range: 0°C(32°F) to 40°C(104°F), up to 80% rh

(with no condensation) \bullet Storage temperature range: -10°C(14°F) to 50°C(122°F), up to 80%rh (with no condensation) ● Applicable standards: EMC EN61326-1:1997+A1:1998 Safety EN61010-1:2001 overvoltage category I (expected overvoltage of 30 V), pollution degree 2 • Accessories: Operation Guide, USB cable, PC communication software (CD-R), alkaline batteries $(LR03) \times 4$

 Communication between the 3912-20 and a Data Logger Data Logger



Install in a fixed location when using infrared optical communication



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 Communication between the 3912-20 and a PC 3912-20 PC communication software USB cable

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Logger Series: the RS-232C-compatible 3911-20 and the newly released USB 1.1-compatible 3912-20. The communication bases have proven popular for their ability to facilitate the collection of data in the field. Because the **3912-20** is equipped with an LCD, it also allows the user to easily check data and change settings.

Specifications of Bundled PC Communication Software

• Supported OS: Windows 98/Me/2000/XP (for DOS/V) • Display: Graph display (16 channels maximum, two cursors, enlarge/reduce/scroll possible), measurement data list display, data count, average value, maximum value, minimum value, recording date and time • Printing: Graph printing (16 channels maximum, printing between cursors), measurement data list, data count, average value, maximum value, minimum value, recording date and time
File formats: Proprietary format (binary code), text save (CSV format) * CSV format: A comma-delimited text format that can be directly read by Excel

Analysis and data processing data on computer

Use either the 3912-20 COMMUNICATION BASE (USB) or the 3911-20 COMMUNICATION BASE (RS-232C) for communication (transferring data and settings) between a Data Logger and a PC.

The 3912-20 can collect up to 16,000 data elements for up to 16 channels; when installed in the field, the 3912-20 can collect data from multiple devices and then send all of the data to a PC for analysis and processing.