

LUX METER FT3424

Environmental measuring instruments



Broad coverage from low to high illuminance

Measure at 0.01 lx resolution to a maximum of 200,000 lx



Compatible with LED lighting*

*Chopped light characteristics: Measured values exhibit deviation of $\pm 2\%$ rdg. when instrument is illuminated with 1/2-cycle chopped light at a frequency of 100 Hz or 120 Hz.

- Complies with DIN Class B and JIS Class AA
- Save up to 99 measured values in the instrument's internal memory and transfer them to a computer later for improved work efficiency
- Timer hold function lets you make measurements in remote locations while avoiding the effects of shadows and reflections



ISO 9001
JMI-0216



ISO 14001
JQA-E-90091



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Support for measurement of 1 lx makes the FT3424 ideal for low-illuminance measurement

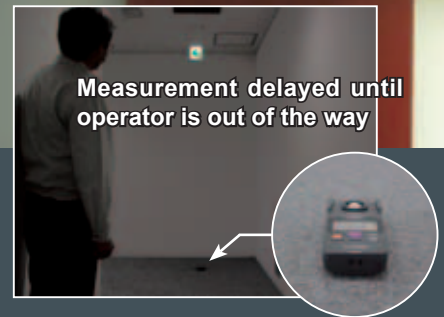
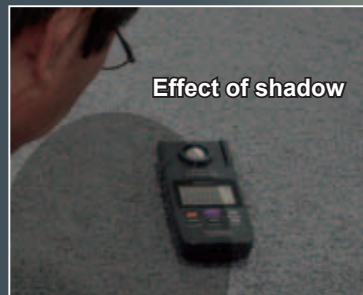
20 lx range measurement resolution **0.01 lx**



1. Timer hold function



Retain the measured value after a user-configured amount of time has elapsed from the time the TIMER key is pressed. In this way, you can time measurement to occur after you have moved away from the lux meter so that measurement is not affected by clothing, shadows, etc.

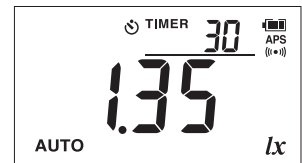


Timer settings

Select from 5 / 10 / 15 / 20 / 30 / 45 / 60 sec.

Remaining time display

Counts down with timer.



After the set time has elapsed

The measured value is retained. → The backlight turns on if the illuminance is less than or equal to 10 lx.

Large, easy-to-see LCD display

The backlight turns on automatically whenever a measured value is retained in a low-illuminance environment.

2. Measurement with sensor and display units undocked



Connection Cable L9820 (Option)

Ideal for measuring aisle guide lights, security lighting, and streetlights



DIN Class B and JIS Class AA compliant for optimal reliability



Key feature

Memory function makes multipoint measurement a breeze



1
Save
in the field

Memory function (up to 99 values)

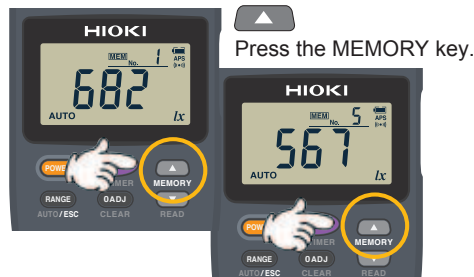
Save measured values for multiple measurement locations in the instrument's internal memory on the spot for later display at your convenience.

2
Transfer to
your PC

Data communications functionality

Transfer data saved in the instrument's internal memory to a computer via a USB connection. Data can be saved as a text file.

When making measurements at numerous locations, this feature lets you save values on the spot and then create a report later in the office at your convenience.



Press the MEMORY key.



USB connection

Key feature

Record variations in illuminance with D/A output.

(Use a commercially available USB power adapter to supply power for extended periods of time.)



Output voltage
2 V full scale

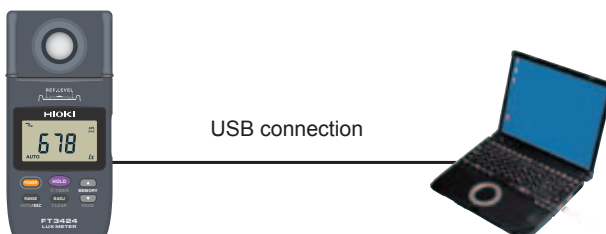


Output cord must be modified to suit the connected device.

Hiooki Voltage Logger LR5042



Record interval data using computer communications software.



USB connection

Other software functionalities

- Display graphs and save files for user-specified time intervals. (Data can also be saved manually.)
- Display measured values on a computer screen in real time.

Operating Environment

Interface: USB

OS: Windows 7, Vista (SP1 or later), XP (SP2 or later)



Specifications

Classification	JIS C 1609-1: 2006 general AA class		
Light receiving element	Silicon photodiode		
Display	Display: 4 digit, 2000 count LCD Display unit: lx (lux) Display update rate: 500 ms ±20 ms		
Measurement ranges	Range	Measurement range	Display step
	20 lx	0.00 lx to 20.00 lx	1 count/step
	200 lx	0.0 lx to 200.0 lx	
	2000 lx	0 lx to 2000 lx	10 counts/step
	20000 lx	00 lx to 20000 lx	
	200000 lx	000 lx to 200000 lx	100 counts/step
Range selection	Auto/Manual		
Linearity	±2% rdg. (Multiply by 1.5 for display values in excess of 3000 lx.) (Add ±1dgt. for display values that are less than 1/3 of the range.)		
Accuracy guarantee conditions	Sensor unit and display unit must bear the same collation number.		
Accuracy guarantee for temperature and humidity	21°C to 27°C (69.8°F to 80.6°F), 75% RH or less (non-condensing)		
Temperature characteristics	Deviation from value measured at 23°C (73.4°F) between -10 to 40°C (14°F to 104°F): ±3% rdg.		
Humidity characteristics	Deviation from value measured in an environment with a temperature and humidity of 23°C (73.4°F), and 45% to 70% RH when the unit is left in an 85% to 95% RH environment for 3 hours and then is returned to the original environment: ±3% rdg.		
Accuracy warranty period	2 years		
Response time	Auto range: within 5 seconds Manual range: within 2 seconds		
Power supply	AA/LR6 alkaline battery × 2		
Continuous battery operation time	Approx. 40 hours (when using AA alkaline batteries)		
Auto-power off	Turns off the instrument 10 min. ±1 min. after the last key operation (can be canceled).		
Operating temperature and humidity	-10°C to 40°C (14°F to 104°F), 80% RH or less (non-condensing)		
Storage temperature and humidity	-20°C to 50°C (-4°F to 122°F), 80% RH or less (non-condensing)		
Operating environment	Indoors, pollution degree 2, altitude up to 2000 m (6562-ft.)		
Applicable standards	Safety: EN61010, EMC: EN61326		
Dustproof and waterproof	IP40 (EN60529)		
Dimensions and mass	Approx. 78W × 170H × 39D mm (3.07" W × 6.69" H × 1.54" D) Approx. 300 g (10.6 oz.) (including the batteries)		
Accessories	Instruction Manual ×1, AA/LR6 alkaline battery ×2, Sensor cap (with strap) ×1, Carrying case (soft) ×1, Strap ×1, USB cable (0.9 m) ×1, CD-R (USB driver, dedicated computer application software, and communications specifications) ×1		

Oblique incident light characteristics

Angle	Deviation from cosine characteristics
30°	±2%
60°	±7%
80°	±25%

Output specifications

Output method	D/A output
Output level	0 to 2 V.f.s.

Resolution

Range	Output rate
20.00 lx	1 mV DC/ 0.01 lx
200.0 lx	1 mV DC/ 0.1 lx
2000 lx	1 mV DC/ 1 lx
2000 0 lx	1 mV DC/ 10 lx
2000 00 lx	1 mV DC/ 100 lx

Output update rate	500 ms ±20 ms
Output accuracy	±1% rdg. ±3 mV (at output rate)
Output resistance	1.1 kΩ or less

Soft carrying case (included accessory)
For storing the FT3424.



Options

Connection Cable L9820



Use when positioning the sensor unit and display unit separately during use.

Output Cord 9094



Required when using the instrument's output function (length: 1.5 m)

Carrying case

C0202 (Soft case)



Handy for storing the instrument with the Output Cord 9094, USB cable, and Connection Cable L9820.

145W x 210H x 70D mm (5.7" W x 8.27" H x 2.76" D)

C0201 (Semi-hard case)



Stores the Output Cord 9094 and a USB cable.

137W x 193H x 69D mm (5.4" W x 7.60" H x 2.72" D)

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