

INCU II™ Incubator/Radiant Warmer Analyzer

Technical Data



Protect a baby's safety by regularly performing all necessary preventive maintenance tests on infant incubators and radiant warmers. Life matters. Testing matters.

The Fluke Biomedical INCU II Incubator/Radiant Warmer Analyzer simplifies testing and ensures proper performance and safety of infant incubators, transport incubators and radiant warmers by complying to all global standards (IEC 60601-2-19, IEC 60601-2-20, IEC 60601-2-21).

Portable and intuitive-to-use, the INCU II simultaneously tests temperature, airflow, sound, and humidity. Test results and parameters can be monitored in real-time on a large easy-to-read LCD screen, or be transferred to your computer wirelessly*.

With a rechargeable battery, the INCU II can stay in the incubator chamber up to 24 hours, without compromising the integrity of the testing environment.

Key features:

- Enables simultaneous measurement of humidity, airflow, sound, and temperature from six different points
- Wireless* functionality supports fast and convenient downloading of test results and data
- Simplifies test set-up with color-coded temperature probes that match color of input ports
- Displays pass/fail indicators and real-time test results on a large LCD screen
- Portable and compact design, weighs less than nine pounds
- Creates personalized test sequences for automatic test completion
- Able to choose from 8 different language interfaces
- Complies with all global standards, including IEC 60601-2-19, IEC 60601-2-20 and IEC 60601-2-21

*Wireless capabilities not available in all countries. Ask your distributor for more details.

Specifications

Physical	
Housing	
Size (HxWxL without sensors)	23 cm x 21 cm x 6 cm (9.0 in x 8.5 in x 2.5 in)
Total weight	3.9 kg (8.5 lb)
Weight with sensors	1.4 kg (3 lb)
Pucks (5)	2.5 kg (5.5 lb)
Carrying case	1.1 kg (2.5 lb)
Power	
Power Adapter – Universal voltage	Input: 100 V to 240 V with adaptors 50 Hz/60 Hz Output: 15V dc, 1.3 A maximum
Rechargeable lithium-ion battery, internal	7.4 V, 7.8 Ah, 58 Wh 24 hour battery life with 30 second sample rate
Measurements and tests specifications	
Air convection peripheral temperature sensors for incubator (T1-T5)	5 sensors
	Range: 0 °C to 50 °C
	Accuracy: ±0.05 °C
	Display resolution: 0.01 °C
Air convection temperature sensors for radiant warmers, sensors in pucks (black discs)	5 pucks
	Range: 0 °C to 50 °C
	Accuracy: ± 0.2 °C
	Display resolution: 0.01 °C
Relative humidity	Range: 0 % to 100 %,
	Accuracy: ± 5 % RH (0 % to 10 % non-condensing)
	± 3 % RH (10 % to 90 %, non-condensing)
	± 5 % RH (90 % to 100 % non-condensing)
	Display resolution: 0.1 % RH
Airflow	Range: 0.2 m/sec to 2.0 m/sec at 35°C, 50 % RH
	Accuracy: +0.1 m/sec
	Display Resolution: 0.01 m/sec
Sound pressure	30 dB(A) to 100 dB(A)
	Accuracy: ± 5 dB(A)
	Display resolution: 0.1 dB(A)
	IEC-61672-1 Class 2 from 31.5Hz to 8kHz
Surface temperature	-5 °C to 60 °C
	Accuracy: ± 0.5 °C
	Display resolution: 0.05 °C
Skin temperature probe with reference thermometer**	0 °C to 50 °C
	Accuracy: ±0.05 °C
	Display resolution: 0.01 °C
Environmental specifications	
Operating temperature	10 °C to 40 °C
Storage temperature	-20 °C to 60 °C
Humidity	10 % to 90 % non-condensing
Altitude	2000 m
Ingress protection rating	IP-20

**Available in January 2016

Safety	
IEC 61010-1	Overvoltage category none, pollution degree 2
IEC 61326-1	Basic
Electromagnetic compatibility (EMC)	
Emissions classification IEC CISPR11: Group 1, Class A.	Group 1 has intentionally generated and/or use conductively coupled radio-frequency energy, which is necessary for the internal functioning of the equipment itself. Class A equipment is suitable for use in nondomestic locations and/or directly connected to a low voltage power supply network.
USA (FCC) Intentional radiators	This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. (15.19)
Korea (KCC) Class A Equipment (Industrial Broadcasting & Communication Equipment)	Class A: Equipment meets requirements for industrial electromagnetic wave equipment and the seller or user should take notice of it. This equipment is intended for use in business environments and not to be used in homes.
Wireless module listing	
FCC (United States) compliant (Class A)	FCC ID: X3ZBTMOD3
IC (Industry Canada) compliant	IC: 8828A-MOD3
CE (European) certified	CE0051
802.15.1 qualified	QD ID: B019224
Wireless radio	
Frequency range	2412 MHz to 2483 MHz
Output power	10 mW
Interface	
Push navigation buttons	Power on/off, test, select, back, and arrow keys
User Preferences	Adjust backlight, display brightness, and set clock
View verification history	
Recall and run templates on tester	General and personalized test templates allow for on-board test automation
Recall past saved and stored tests results	
Templates	Time duration, frequency of data capture and tests
Select user preferences	Units of measure, view and print test results on laptop
View battery life	Indicator bar shows life remaining
Interface languages	English, French, German, Italian, Spanish, Brazilian Portuguese, Simplified Chinese, Japanese

Ordering information

Item#	Model	Item description
472262	INCUB II-BT	Incubator Analyzer, Wireless
4722635	INCUB II-NO BT	Incubator Analyzer, Non-Wireless
Standard Accessories		
4720996	INCUB II-Cable	K-Type Thermocouple
4721000	INCUB II S Sensor	Sound Sensor
4721017	INCUB II A F Sensor	Air Flow Sensor
4721021	INCUB II H Sensor	Humidity Sensor
4721039	INCUB II R Sensor	Red Temperature Sensor
4721042	INCUB II G Sensor	Green Temperature Sensor
4721056	INCUB II Y Sensor	Yellow Temperature Sensor
4721063	INCUB II W Sensor	White Temperature Sensor
4721074	INCUB II B Sensor	Blue Temperature Sensor
4721109	INCUB II Spacers	Tripod Spacers
4721111	INCUB II R Puck	Red Temperature Puck
4721127	INCUB II G Puck	Green Temperature Puck
4721130	INCUB II Y Puck	Yellow Temperature Puck
4721148	INCUB II W Puck	White Temperature Puck
4721153	INCUB II B Puck	Blue Temperature Puck
4721166	INCUB II USB	Type A to Micro B, USB Cable
4721194	INCUB II Adapter	AC Adapter
4715713	INCUB II Pad	Placement Pad Microfiber
4715749	INCUB II Carry case	Soft Carry Case
4724692	INCUB II Puck case	Soft Carry Case Puck
Optional accessories		
4721175	INCUB II ST Heater	Skin Temperature Heater Assembly**

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Fluke Biomedical Regulatory Commitment

As a medical test device manufacturer, we recognize and follow certain quality standards and certifications when developing our products. We are ISO 9001 and ISO 13485 medical device certified and our products are:

- CE Certified, where required
- NIST Traceable and Calibrated
- UL, CSA, ETL Certified, where required
- NRC Compliant, where required

Fluke Biomedical.

Trusted for the measurements that matter.

Fluke Biomedical

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