

fNIR103P Wireless Pediatric Functional Near Infrared Brain Imaging System with 2000P Imager



NOTE: The fNIR103P System and RXfNIR-PED Pediatric Sensor was discontinued in September of 2020.

Wireless, stand-alone imaging system—includes a control unit, fNIRSoft Standard/COBI, and choice of one sensor: 2-channel Pediatric Sensor (RXFNIR-PED) or 4-channel Adult Sensor (RXFNIR4). The 2000P Imager supports a maximum of 4 channels. This system is backward-compatible to the fNIR Imager 1200.

The wireless fNIR103P provides users with an in-lab assessment of cognitive function. It eliminates a great many of the drawbacks of a functional MRI. The subject can sit in front of a computer and take a test or perform mobile tasks. It integrates with stimulus presentation systems and BIOPAC’s virtual reality products.

fNIR103P is suitable for a wide range of applications: Human Performance Assessment, Depth of Anesthesia Monitoring, Brain Computer Interface, Virtual Reality, Neurorehabilitation, Autism, and Credibility Assessment (lie detection).

RXfNIR-PED Pediatric Sensor

Pediatric-sized fNIR optical brain imaging sensor.

- 2 photo-detectors: silicon photodiode with integrated trans-impedance preamp
- 1 photo-emitter: 730 nm/850 nm dual wave-length LED
- inter-optode distance: 20 mm
- silicone rubber over-molded
- comfortable to wear for prolonged periods
- optional sensor choice for wireless fNIR Systems
- compatible with wireless (fNIR2000W) and wired (fNIR1200) imagers



fNIR System	Type	Max CH	Included Sensor	Software (*pre-loaded)	Computer/Stand	TTL	Isolation
fNIR103P	Wireless Pediatric Imager 2000P/1200	4	RXFNIR-PED or RXFNIR-4 for Adults	fNIRSoft Standard and COBI*	--	--	n/a
Time resolution of measurements:	Pediatric Imager = 250 ms						
Pediatric Imager Dimensions :	85 mm (W) x 25 mm (H) x 105 mm (D)						
Forehead Sensor (prefrontal cortex):	Real-time oxy-Hb, deoxy-Hb, and raw data values for each channel measurement area						
	<u>Fit</u>	<u>Channels</u>	<u>Detectors</u>	<u>Emitters</u>	<u>Inter-optode distance</u>	<u>Compatible</u>	
RXFNIR-PED:	Pediatric	2	2	1	20 mm	wireless	

Pediatric systems ship with one sensor, specify choice of pediatric 2-channel sensor (RX-FNIR-PED) or adult split 4-channel sensor