

MEASURE THE ANS CONTROL NOCICEPTION IMPROVE OUTCOMES

NIPE Monitor

Newborn Infant Parasympathetic Evaluation



The NIPE technology provides an objective way to assess the nociception/analgesia balance for neonates and young infants, allowing care to be individualized.

NIPE offers a continuous assessment of the parasympathetic component of the autonomic nervous system in neonates and young infants. This unique technology is proven to work with extremely premature babies, from around 26 weeks gestation, through to infants up to two years of age. The NIPE is based on the electrocardiogram taken from the patient monitor in use and does not require additional patient sensors.



NIPE technology benefits:



Continuous and non-invasive measurement of parasympathetic activty

Julien De Jonckheere et al . Journal of Clinical Monitoring and Computing 2019.



Evaluation of prolonged pain with NIPEm

Buyuktiryaki M et al. Korean J Pediatr 2018.



Evaluation of acute nociception with NIPEi

Frank Weber F, et al. Paediatr Anaesth. 2019 Feb 21.



Evaluation of confort and NIDCAP process

Butruille 2017 Infant Behav Dev. Alexandre et al. Arch Pediatr. 2013.

NIPE Monitor Technical Specifications

General

Parameter	Specification
Power Requirements	100-250 VAC through AC power adapter
Mains Frequency	50Hz
AC Power consumption	49W
DC Input	12V+/- 5% 60W

Output

Parameter	Specification	
Export Protocol	UART interface	
Data Export	USB interface	

Environmental

Parameter	Specification
Cooling Method	Convection. Fan less
Temperature Operating Storage	5°C to 35°C -20°C to 60°C
Relative Humidity Operating Storage	>15% and <95% non-condensing >15% and <95% non-condensing
Altitude Operating Storage	480 hPa to 1066 hPa 480 hPa to 1066 hPa
Dimensions Monitor (with collet fixture)	27(width) x 24,7(height) x 14,5(depth)cm
Weight Monitor (with collet fixture)	1,83kg

Connector

Parameter	Specification
AC Input (monitor)	Jack DC 3-pin power connector
Export (monitor)	Sub-D9 connector to export data in real time
Data Export (Monitor)	USB connector to export data and snapshot to USB stick
Multi parametric link	6 pin circular connector (to multiparametric scope)

Screen

Parameter	Specification
Type	Color Liquid Crystal
Size	200 mm (8 inches)
Resolution	800 x 600 pixels
Active Viewing Area	173 x 130 mm
Pixel pitch	0.216 x 0.217 mm