# MIDDLE EAR ANALYZER







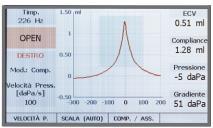
Flute is a diagnostic middle ear analyzer, capable of performing incredibly fast and reliable automatic sequences tympanometry and reflex threshold tests, as well as manual reflex and reflex decay tests, ETF test, and high frequency tympanometry. Great versatility, a user-friendly interface, advanced features and small size make Flute the ideal choice for a wide range of users, from hearing aid dispensers to clinics and hospitals.



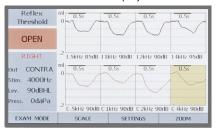
#### **THE MODELS**

Flute is available in three models: Basic, Plus and HF. The following table is an overview of the tests available on each version.

	Basic	Plus	HF
Automatic tympanometry	<b>~</b>	<b>✓</b>	<b>✓</b>
Automatic acoustic reflex thresholds	<b>~</b>	<b>✓</b>	<b>✓</b>
Reflex test with fixed intensities	<b>~</b>	<b>✓</b>	<b>✓</b>
Reflex test with increasing intensity	<b>~</b>	<b>✓</b>	<b>✓</b>
Manual acoustic reflex	=	<b>✓</b>	-
Quick tests (tymp. + reflex sequence)	<b>~</b>	<b>✓</b>	<b>✓</b>
Acoustic reflex decay	-	<b>✓</b>	-
Manual pump control	=	<b>✓</b>	=
Eustachian Tube Function (intact TM)	=	<b>~</b>	<b>✓</b>
Eustachian Tube Function (perforated TM)	-	-	<b>✓</b>
Probe tones	226Hz	226Hz	226Hz 1000Hz



Flute display



Flute is developed by

#### INVENTIS s.r.l.

CORSO STATI UNITI, 1/3 35127 ΡΔΠΟΥΔ - ΙΤΔΙ Υ

PHONE: +39.049.8962 844 +39.049.8966 343

info@inventis.it www.inventis.it

Follow us on Twitter http://twitter.com/inventissrl



The Inventis Quality System complies with ISO 9001 and ISO 13485 standards.

## **AUTOMATIC TEST SEQUENCES**

Speed up your middle-ear tests with the two available automatic exam sequences combined with special "fast" algorithms, all accurately developed to shorten the time needed for tympanometry and acoustic reflex assessments.

### **ULTIMATE HARDWARE TECHNOLOGY**

Flute features an innovative pump technology for continuous air flow and a finely-designed probe. All combined to fit into an incredibly lightweight (just 2 kg) case.



Flute features an extremely light, small and sturdy metal probe, which can be very rapidly disassembled and cleaned. The probe is connected to the small Control Box, through which you can select the ear and start the exam.

#### **NOAH & DAISY INTEGRATION**

Simply connect Flute to a USB port on your computer (no driver needed), and you can transfer exam results into your Daisy or Noah database. And with the live view feature, you can have a wide view of the examination in progress on the computer display.

#### **TECHNICAL DATA**

#### Measurement system

Probe tone...... 226 Hz at 85 dB SPL

1000 Hz at 75 dB SPL (only HF model)

Compl. range..... 0.2 to 8.0 ml

Pressure range... From -600 to +400 daPa

Man. pump contr. .. Available in Plus model

#### Tympanometry

Type of test...... Automatic tympanometry

Manual tympanometry (Plus model)

Press. change ... 50, 100, 200, 300 daPa/sec, AUTO

#### Acoustic reflex

Stimulation...... Ipsi and Contralateral

Available tests... Autothreshold, Fixed intensity, Growing intensity Only in Plus model: Manual test, Reflex decay

Stimuli ......250 (C), 500, 1k, 2k, 4k Hz

Only Plus: 3k, 6k, 8k (C) Hz, LPN, HPN, BBN, no stim.

Maximum int. .... 110 dB HL (ipsi); 120 dB HL (contra)

Stim. duration.... From 0.5 to 2.5 sec (selectable)

Reflex decay: 10 or 20 sec

Automatic tests ... Quick A and B (seq. of tympan. and reflex)

ETF test ......Intact eardrums (Plus and HF models)

Perforated eardrums (only HF model)

Memory ......1 tympan. + 8 reflex + 4 decay record. per ear

Display type ....... Color graphical

Display size / res.... 4.3", 480 x 272

Printer.....Built-in thermal printer (optional)

PC interface.......USB (driverless)

Compatible soft... Inventis Daisy or Noah with dedicated module

Dimensions ....... 32 x 32 x 9 cm - 12.6 x 12.6 x 3.5 in

Weight ......2.0 Kg / 4.4 lbs

Standards......Tympan.: EN 60645-5 / ANSI S3.39, Type 2

Safety: EN 60601-1

EMC: EN 60601-1-2

Classification...... Class IIa (MDD 93/42)