

Quantum™ E

13 BTE series

Signature features

6 channels

SmartFocus

Available within each manual program and is a fitter adjustable control for comfort or clarity

Natural Sound Balance

An adaptive feature to minimize artifacts that can occur when amplified sound combines in the ear canal with direct sound. Natural Sound Balance continuously monitors these sounds and makes precision adjustments to preserve a clear, balanced signal

Automatic Adaptation Manager

Allows for an automatic and smooth adjustment period for the client; providing the best possible first fit acceptance combined with maximum long-term benefit for speech understanding

Feedback manager

Feedback manager offers maximum usable gain by suppressing feedback transients before they become audible

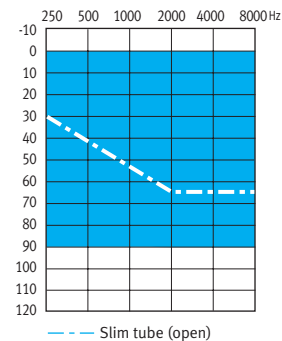
Wireless technology

DuoLink – adjustments conducted on one hearing instrument are automatically transferred to the other ear

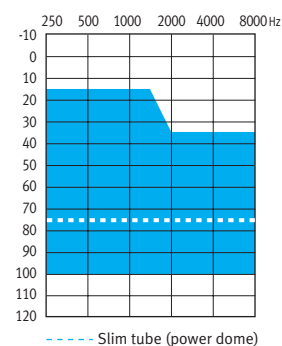
Additional features

- 4 manual programs
- Adaptive directional microphone
- AntiShock™
- MyMusic™
- Wind noise manager
- Speech enhancement LD
- Noise reduction
- Data logging
- Easy-t and telecoil
- DAI
- Optional Unitron remote control or Smart Control
- Optional Smart Alert™ System
- Optional wireless programming with iCube
- IntelliVent technology available on custom ear pieces

Fitting guides



Quantum E S
(standard)



Quantum E HP
(high power)

Quantum E is suitable for fitting mild to severe hearing losses and can fit audiogram configurations ranging from reverse to precipitously sloping.

Quantum E 13 BTE series

Quantum E S slim tube (optional) Quantum E S (standard) Quantum E HP (high power) Quantum E HP slim tube (optional)

ANSI 3.22 2003/IEC 118-7 2CC COUPLER TECHNICAL DATA

	Reference test frequency - IEC 118-7 (kHz)	2.5	1.6	1.6	2.5
	OSPL90				
	Maximum (dB SPL)	124	129	133	130
	Nominal (dB SPL)	122	126	130	127
	ANSI HFA (dB SPL)	109	119	125	112
	at RTF (dB SPL)	105	121	123	109
	Full on gain (input 50 dB SPL)				
	Maximum (dB)	53	60	70	65
	ANSI HFA (dB)	40	51	64	50
	at RTF (dB)	36	53	60	47
	Basic frequency response (ANSI 2003)				
	Frequency range (Hz)	100-6700	100-6700	100-6000	100-6900
	Reference test gain (dB)	32	42	47	35
	Current drain at RTG (mA)	1.3	1.3	1.3	1.3
	Typical battery life (h)	240	240	240	240
	Equivalent input noise at RTG (dB SPL)	20	19	19	20
	Total harmonic distortion at 500 Hz/800 Hz/1600 Hz (%)	1/1/1	2/2/1	3/1.5/1	1/1/1
	Induction coil sensitivity (ANSI 2003, 31.6 mA/m)				
	HFA SPLITS/STS-RSETS (dB SPL/dB)	90/0	103/0	107/0	93/0
	Quantum S: mic at 70 dB SPL vs induction coil at 100 mA/m				

Electromagnetic compatibility				
EMC immunity by ANSI c63.19-2001 EMC, omni/telecoil	M4/T4	M4/T4	M4/T4	M4/T4

IEC 118-0 OES COUPLER TECHNICAL DATA

	Reference test frequency - IEC 118-0 (kHz)	2.5	1.6	1.6	2.5
	OSPL90				
	Maximum (dB SPL)	126	131	135	131
	at RTF (dB SPL)	119	130	130	124
	Full on gain (input 50 dB SPL)				
	Maximum (dB)	58	64	75	70
	at RTF (dB)	50	63	67	60
	Basic frequency response				
	Frequency range (DIN 45605) (Hz)	100-5300	100-7000	100-6200	100-6700
	Reference test gain (dB)	44	55	55	49
	Current drain at RTG (mA)	1.3	1.3	1.3	1.3
	Typical battery life (h)	240	240	240	240
	Equivalent input noise at RTG (dB SPL)	12	19	19	12
	Total harmonic distortion at 500 Hz/800 Hz/1600 Hz (%)	2/2/1	3/3/1	4/2.5/1.5	2/2/1
	Induction coil sensitivity				
	at RTF (graph shown for 31.6 mA/m at RTG) (dB SPL)	105	114	116	108
	Maximum (1 mA/m at full on gain) (dB SPL)	86	95	104	99
	at RTF (1 mA/m at full on gain) (dB SPL)	81	94	99	91
Electromagnetic compatibility					
EMC immunity by IEC 60118-13, field strength 75/50 V/m, omni IRIL low/high band (dB SPL)	26/45	26/45	26/52	26/52	

LEGEND TEST CONDITIONS

Quantum E S
 Quantum E HP

Earhook: filtered; Battery size: 13; Source: voltage 1.3 V; Tubing: length 25 mm, inside diameter 1.93 mm
 Measurement data obtained with hearing aid set to linear, omni mode with all adaptive features disabled.
 Domes should never be fit on patients with perforated eardrums, exposed middle ear cavities, or surgically altered ear canals.
 In the case of such a condition, we recommend use of a customized earmold.
 Sound pressure level of these hearing aids exceeds 132 dB SPL.
 We reserve the right to change specification data without notice as improvements are introduced.