

# Quantum™ E

## ITE 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

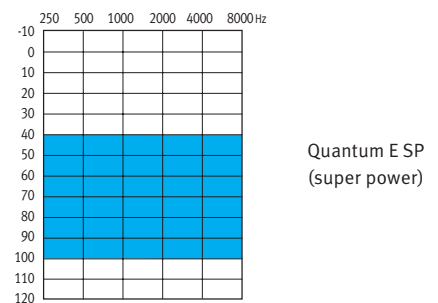
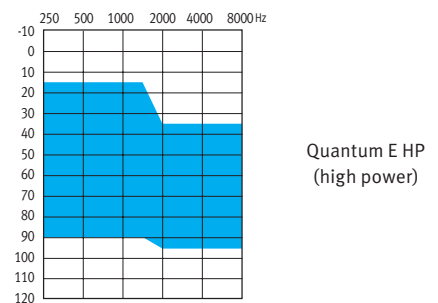
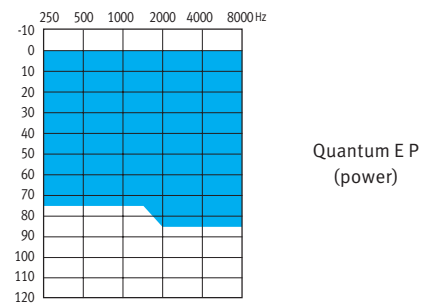
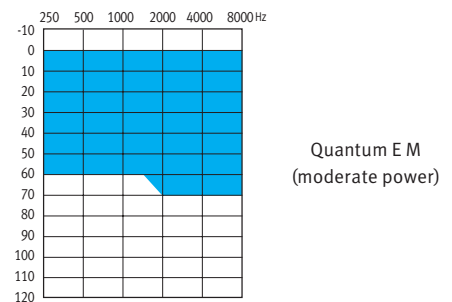
DuoLink – adjustments conducted on one hearing instrument are automatically transferred to the other ear

### Additional features

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



### Fitting guides



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

#### Quantum E ITEs offer flexible ordering!

Wireless and directional microphone guide:

- 13 Always wireless, always directional
- 312 Available any combination
- 10A Always non-wireless and omni microphone

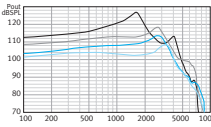
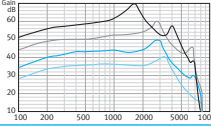
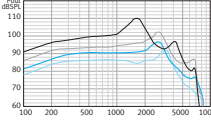
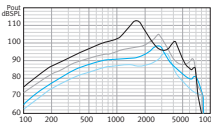
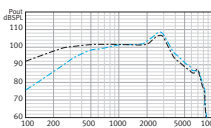
Battery and style guide: S=Standard; O=Optional

Battery	FS	HS	CA	MC	CIC
13	S	O	O		
312	O	S	S	Omni	
10A	O	O	O	S	S

# Quantum E ITE series

Quantum E M (moderate power)    Quantum E P (power)    Quantum E HP (high power)    Quantum E SP (super power)

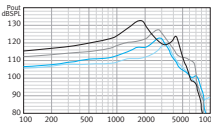
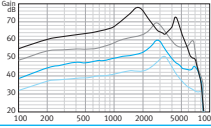
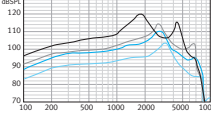
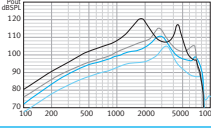
## ANSI 3.22 2003/IEC 118-7 2CC COUPLER TECHNICAL DATA

	Reference test frequency - IEC 118-7 (kHz)	1.6	1.6	1.6	1.6
	<b>OSPL90</b>				
	Maximum (dB SPL)	112	117	122	130
	Nominal (dB SPL)	109	114	119	127
	ANSI HFA (dB SPL)	103	109	114	120
	at RTF (dB SPL)	103	109	113	127
	<b>Full on gain (input 50 dB SPL)</b>				
	Maximum (dB)	40	50	60	70
	ANSI HFA (dB)	37	45	54	62
	at RTF (dB)	35	43	53	70
	<b>Basic frequency response (ANSI 2003)</b>				
	Frequency range (Hz)	100-7500	100-7500	100-7100	100-5500
	Reference test gain (dB)	26	32	37	43
	Current drain at RTG (mA) 10A/312/13	1.2/1.2/1.2	1.2/1.2/1.2	1.2/1.2/1.2	--/1.2/1.2
	Typical battery life (h) 10A/312/13	80/150/260	80/150/260	80/150/260	--/150/260
	Equivalent input noise at RTG (dB SPL)	19	19	19	19
	Total harmonic distortion at 500 Hz/800 Hz/1600 Hz (%)	1.5/1.5/1.0	1.5/1.5/1.0	1/1/1	1/1/1
	<b>Induction coil sensitivity (ANSI 2003, 31.6 mA/m)</b>				
	HFA SPLITS/STS (dB SPL/dB)	88/2	94/2	99/2	104/1
	<b>Quantum P: mic at 70 dB SPL vs. induction coil at 100 mA/m</b>				
	--- Mic				
	- - - Induction coil				

### Electromagnetic compatibility

EMC immunity by ANSI C63.19-2001 EMC, omni/telecoil	M4/T4	M4/T4	M4/T4	M4/T4
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## IEC 118-0 OES COUPLER TECHNICAL DATA

	Reference test frequency - IEC 118-0 (kHz)	1.6	1.6	1.6	1.6
	<b>OSPL90</b>				
	Maximum (dB SPL)	120	123	128	133
	at RTF (dB SPL)	111	118	121	132
	<b>Full on gain (input 50 dB SPL)</b>				
	Maximum (dB)	50	60	70	79
	at RTF (dB)	44	52	62	76
	<b>Basic frequency response</b>				
	Frequency range (DIN 45605) (Hz)	100-8200	100-8200	100-7500	100-5500
	Reference test gain (dB)	36	43	46	57
	Current drain at RTG (mA) 10A/312/13	1.2/1.2/1.2	1.2/1.2/1.2	1.2/1.2/1.2	--/1.2/1.2
	Typical battery life (h) 10A/312/13	80/150/260	80/150/260	80/150/260	--/150/260
	Equivalent input noise at RTG (dB SPL)	19	19	19	19
	Total harmonic distortion at 500 Hz/800 Hz/1600 Hz (%)	2.0/2.0/1.5	2.0/2.0/1.5	1.0/1.5/1.0	1.5/1.5/1
	<b>Induction coil sensitivity</b>				
	at RTF (graph shown for 31.6 mA/m at RTG) (dB SPL)	96	102	106	119
	Maximum (1 mA/m at full on gain) (dB SPL)	83	92	102	110
	at RTF (1 mA/m at full on gain) (dB SPL)	76	85	94	108
	<b>Electromagnetic compatibility</b>				
	EMC immunity by IEC 60118-13, field strength 75/50 V/m, omni IRIL low/high band (dB SPL)	31/41	29/40	34/45	23/32

### LEGEND

- Quantum E SP
- Quantum E HP
- Quantum E P
- Quantum E M

### TEST CONDITIONS

Battery size: 10A/312/13; Source voltage: 1.3 V; Impedance: 16/7.5/7.5 Ohms; Vent: closed at canal end  
 Tubing 7mm (2cc/OES coupler) – Quantum E M, Quantum E P, Quantum E HP.  
 Tubing 9 mm (2cc coupler), Tubing 5mm (OES coupler) - Quantum E SP.  
 Measurement data obtained with hearing aid set to linear, omni mode with all adaptive features disabled.  
 We reserve the right to change specification data without notice as improvements are introduced.