

Quantum²

Quantum² Pro, Quantum² 20, Quantum² 16,
Quantum² 10, Quantum² E
ITE hearing aid series



Performance profile

	Quantum ² Pro*	Quantum ² 20	Quantum ² 16	Quantum ² 10	Quantum ² E
Channels / bands	20	20	16	10	6
Processing types	WDRC and linear	WDRC and linear	WDRC and linear	WDRC and linear	WDRC and linear
Adaptive directional	Multiband	Multiband	Multiband	Multiband	•

Signature features

SpeechZone2	•				
Binaural spatial processing	•				
Automatic Program	Automatic 4	Automatic 4	Automatic 3	Automatic 2	Manual
SmartFocus2	•	•	•		
SmartFocus				•	•
Binaural Phone (with wireless)	•	•	•	•	
Automatic Adaptation Manager	•	•	•	•	•
Pinna Effect	•	•	•		
LearnNow	•	•			
Self learning	•	•	•		

Features

Manual programs	Up to 3	Up to 3	Up to 3	Up to 3	Up to 4
Feedback manager	•	•	•	•	•
Natural Sound Balance	•	•	•	•	•
AntiShock	•	•	•	•	•
Easy-t (optional)	•	•	•	•	•
MyMusic	Automatic	Automatic	•	•	•

In all technology levels

3 wireless programs (not available on E), data logging, wind noise manager, DuoLink (with wireless), IntelliVent technology and tinnitus masker

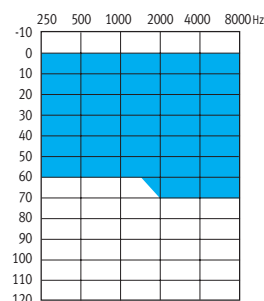
Accessories (optional)

Remote control	•	•	•	•	•
Smart Control remote	•	•	•	•	•
uDirect 2 (with wireless)	•	•	•	•	
uTV 2 (with wireless)	•	•	•	•	
uMic (with wireless)	•	•	•	•	

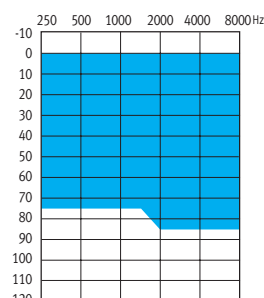
Battery size	Full shell	Half shell	Canal	Mini canal	CIC	Wireless	Microphone
13	Standard	Optional	Optional	N/A	N/A	Yes	Directional
312	Optional	Standard	Standard	N/A	N/A	Optional	Directional
10A	Optional	Optional	Optional	Standard	Standard	N/A	Omni

*Pro is only available with wireless and directional products

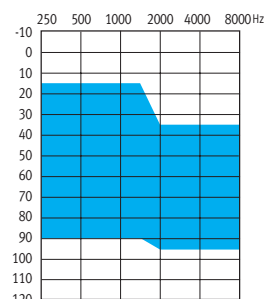
Fitting guides



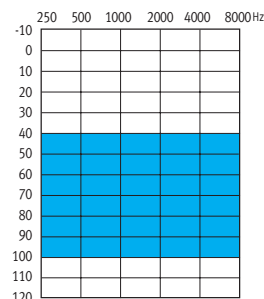
Moderate power



Power



High power



Super power

ANSI 3.22 2009/IEC 118-7 2005 2cc coupler technical data

Reference test frequency - IEC 118-7 (kHz)		1.6	1.6	1.6	1.6
	OSPL90				
	Maximum (dB SPL)	112	118	122	130
	Nominal (dB SPL)	109	115	119	127
	HFA - OSPL90 (dB SPL)	103	111	114	120
	at RTF (dB SPL)	103	109	113	127
	Full on gain (input 50 dB SPL)				
	Maximum (dB)	40	50	60	70
	HFA - FOG (dB)	37	46	54	62
	at RTF (dB)	35	43	53	70
	Reference test setting (RTS)				
	Frequency range (Hz)	100-7500	100-7500	100-7100	100-5500
	Reference test gain (dB)	26	34	37	43
	Current drain at RTS (mA) 10A/312/13	1.2/1.2/1.2	1.4/1.4/1.4	1.2/1.2/1.2	--/1.2/1.2
	Typical battery life (h) 10A/312/13	80/150/260	70/130/220	80/150/260	--/150/260
	Equivalent input noise at RTS (dB SPL)	19	19	19	19
	Total harmonic distortion at 500 Hz/800 Hz/1600 Hz (%)	1.5/1.5/1.0	1.5/1.5/1.5	1/1/1	1/1/1
	Induction coil sensitivity (31.6 mA/m)				
	HFA SPLITS/STS (dB SPL/dB)	88/2	95/1	99/2	104/1
	Power: mic at 70 dB SPL vs. induction coil at 100 mA/m — 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-o OES coupler technical data

Reference test frequency - IEC 118-o (kHz)		1.6	1.6	1.6	1.6
	OSPL90				
	Maximum (dB SPL)	120	124	128	133
	at RTF (dB SPL)	111	119	121	132
	Full on gain (input 50 dB SPL)				
	Maximum (dB)	50	60	70	79
	at RTF (dB)	44	53	62	76
	Basic frequency response				
	Frequency range (DIN 45605) (Hz)	100-8200	100-8200	100-7500	100-5500
	Reference test gain (dB)	36	44	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 (%)	2/2/1.5	2.5/2.5/2	1/1.5/1	1.5/1.5/1
	Induction coil sensitivity				
	at RTF (graph shown for 31.6 mA/m at RTG) (dB SPL)	96	104	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
Electromagnetic compatibility					
EMC immunity by IEC 60118-13, 2011 field strength 90/50/35 V/m, omni, IIRL low/medium/high band (dB SPL)		26/30/35	26/30/35	26/30/35	26/30/35

Legend

Super power
 High power
 Power
 Moderate power

Test conditions

Battery size: 10A/312/13; Source voltage: 1.3 V; Vent: closed at canal end
 Tubing 7mm (2cc/OES coupler) – Quantum² M, Quantum² P, Quantum² HP.
 Tubing 9 mm (2cc coupler), Tubing 5mm (OES coupler) – Quantum² SP.
 The hearing instrument set to Unitron TrueFit test settings.
 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.