

# Quantum™ 20

## Micro BTE

### Signature features

#### 20 channels

#### Next generation automatic with SmartFocus

Clients can experience superior automatic performance with the optimal blend of 3 listening environments plus a unique specialized treatment of music. In addition, the integration of SmartFocus™ further improves speech understanding in noise or provides optimal comfort automatically

#### Pinna Effect

This feature uses sophisticated calculations to recreate natural directionality

#### 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

#### Next generation feedback manager

Harnessing the power of Unitron's new Era™ platform, the next generation feedback manager offers maximum usable gain by suppressing feedback transients before they become audible

#### Self learning

Capable of learning client preferences for SmartFocus and volume control in all programs

#### Wireless technology

**Binaural Phone** – streams audio to the non-phone ear, allowing for binaural hearing while using a phone

**DuoLink** – program, volume and SmartFocus adjustments conducted on one hearing instrument are automatically transferred to the other ear

**uDirect (optional)** – Wireless interface between hearing instruments and Bluetooth® enabled devices (eg. cell phones)

**uTV™ (optional)** – streams audio from a TV or audio source to the uDirect

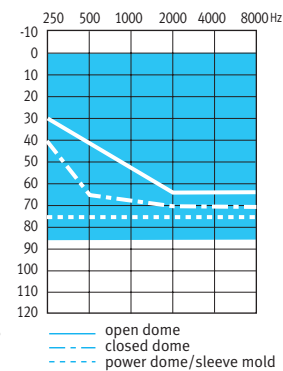
#### Remote control (optional)

Discreet remote with easy, straightforward control of essential features

### Additional features

- 3 manual + 3 wireless streaming programs
- IntelliVent technology available on earmolds and sleeve molds
- Multiband adaptive directional microphone
- AntiShock™
- MyMusic™
- Speech enhancement LD
- Noise reduction
- Wind noise manager
- Data logging
- DAI through uDirect
- Optional wireless programming with iCube

### Fitting guides



Quantum 20 M  
micro BTE

Quantum 20 micro BTE is suitable for fitting mild to severe hearing losses and can fit audiogram configurations ranging from reverse to precipitously sloping.

# Quantum 20 micro BTE

Quantum 20 M  
micro BTE (slim tube)

Quantum 20 M  
micro BTE (earhook)

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

	Reference test frequency - IEC 118-7 (kHz)	1.6	1.6
	<b>OSPL90</b>		
	Maximum (dB SPL)	126	133
	Nominal (dB SPL)	123	130
	ANSI HFA (dB SPL)	114	120
	at RTF (dB SPL)	111	125
	<b>Full on gain (input 50 dB SPL)</b>		
	Maximum (dB)	54	57
	ANSI HFA (dB)	48	50
	at RTF (dB)	45	53
	<b>Basic frequency response (ANSI 2003)</b>		
	Frequency range (Hz)	< 100-5600	< 100-6000
	Reference test gain (dB)	37	43
	Current drain at RTG (mA)	1.2	1.25
	Typical battery life (h)	140	136
	Equivalent input noise at RTG (dB SPL)	19	19
	Total harmonic distortion at 500 Hz/800 Hz/1600 Hz (%)	1/.5/.5	2/1/.5
	EMC immunity by ANSI c63.19-2001 EMC, omni	M4	M4

## IEC 118-0 OES COUPLER TECHNICAL DATA

	Reference test frequency - IEC 118-0 (kHz)	1.6	1.6
	<b>OSPL90</b>		
	Maximum (dB SPL)	128	133
	at RTF (dB SPL)	120	132
	<b>Full on gain (input 50 dB SPL)</b>		
	Maximum (dB)	60	62
	at RTF (dB)	54	61
	<b>Basic frequency response</b>		
	Frequency range (DIN 45605) (Hz)	< 100-6000	< 100 -7100
	Reference test gain (dB)	45	54
	Current drain at RTG (mA)	1.2	1.2
	Typical battery life (h)	140	140
	Equivalent input noise at RTG (dB SPL)	19	19
	Total harmonic distortion at 500 Hz/800 Hz/1600 Hz (%)	1/.5/1	2/1/1
	EMC immunity by IEC 60118-13, field strength 75/50 V/m, omni IRIL low/high band (dB SPL)	25/26	25/26

### Legend

- Quantum 20 micro BTE with slim tube
- Quantum 20 micro BTE with earhook

## TEST CONDITIONS

Battery size: 312; Source: voltage 1.3 V

The measurements obtained with closed configuration using an HA-1 coupler (ANSI-3.7-1995) or occluded ear simulator (EN 60711, coupling arrangement according to fig.4 in the test standard)

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.

We reserve the right to change specification data without notice as improvements are introduced.