



# Legato Li

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Data Sheet  
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# Legato Li · Technical Data

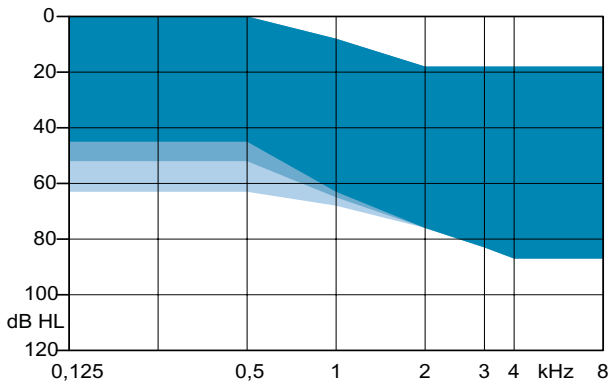
Type	S-Receiver		M-Receiver	
				
	2 ccm coupler	Ear simulator	2 ccm coupler	Ear simulator
<b>Output sound pressure level</b>				
at 1.6 kHz	-	109 dB SPL	-	122 dB SPL
Peak	108 dB SPL	119 dB SPL	119 dB SPL	129 dB SPL
HFA-OSPL 90	102 dB SPL	-	114 dB SPL	-
<b>Gain</b>				
Full on gain (FOG) at 1.6 kHz	-	43 dB	-	55 dB
Full on gain (peak)	45 dB	56 dB	60 dB	70 dB
HFA-FOG	37 dB	-	50 dB	-
Reference test gain	25 dB	34 dB	37 dB	47 dB
<b>Frequency, noise and directivity</b>				
Frequency range	100-10000 Hz	100-10500 Hz	100-8800 Hz	100-10000 Hz
Equivalent input noise	18 dB SPL	22 dB SPL	19 dB SPL	23 dB SPL
Total harmonic distortion at 500 / 800 / 1600 Hz	1 / 1 / 1 %	1 / 1 / 2 %	1 / 1 / 2 %	1 / 3 / 3 %
AI-DI	3.8 dB		3.8 dB	
<b>Inductive coil sensitivity</b>				
MASL (1 mA/m) at 1.6 kHz	-	75 dB SPL	-	85 dB SPL
HFA MASL (1 mA/m)	68 dB SPL	-	80 dB SPL	-
HFA SPLITS (left/right)	84 / 84 dB SPL	-	96 / 96 dB SPL	-
RSETS (left/right)	-1 / -1 dB SPL	-	-1 / -1 dB SPL	-
<b>Battery</b>				
Battery voltage	1.25 V		1.25 V	
Battery current drain	0.9 mA		1.0 mA	
Battery life (rechargeable)	up to 28 hr		up to 27 hr	
<b>IRIL IEC 118-13:2011 (bystander)</b>				
800-960 MHz	<-39 dB SPL		<-39 dB SPL	
1400-2000 MHz	<-43 dB SPL		<-43 dB SPL	
ANSI C63.19	M4 / T4		M4 / T4	

# Legato Li · Technical Data

Type	P-Receiver		HP-Receiver	
				
	2 ccm coupler	Ear simulator	2 ccm coupler	Ear simulator
Output sound pressure level				
at 1.6 kHz	-	128 dB SPL	-	137 dB SPL
Peak	124 dB SPL	134 dB SPL	130 dB SPL	138 dB SPL
HFA-OSPL 90	120 dB SPL	-	124 dB SPL	-
Gain				
Full on gain (FOG) at 1.6 kHz	-	70 dB	-	82 dB
Full on gain (peak)	70 dB	80 dB	75 dB	82 dB
HFA-FOG	63 dB	-	68 dB	-
Reference test gain	43 dB	53 dB	48 dB	62 dB
Frequency, noise and directivity				
Frequency range	100-7800 Hz	100-8100 Hz	100-7500 Hz	250-5200 Hz
Equivalent input noise	18 dB SPL	21 dB SPL	18 dB SPL	12 dB SPL
Total harmonic distortion at 500 / 800 / 1600 Hz	2 / 2 / 1 %	3 / 3 / 2 %	1 / 2 / 1 %	1 / 1 / 1 %
AI-DI	3.8 dB		3.8 dB	
Inductive coil sensitivity				
MASL (1 mA/m) at 1.6 kHz	-	100 dB SPL	-	114 dB SPL
HFA MASL (1 mA/m)	91 dB SPL	-	99 dB SPL	-
HFA SPLITS (left/right)	102 / 102 dB SPL	-	107 / 107 dB SPL	-
RSETS (left/right)	-1 / -1 dB SPL	-	-1 / -1 dB SPL	-
Battery				
Battery voltage	1.25 V		1.25 V	
Battery current drain	1.0 mA		1.1 mA	
Battery life (rechargeable)	up to 27 hr		up to 26 hr	
IRIL IEC 118-13:2011 (bystander)				
800-960 MHz	-39 dB SPL		-39 dB SPL	
1400-2000 MHz	<-43 dB SPL		<-43 dB SPL	
ANSI C63.19	M4 / T4		M4 / T4	

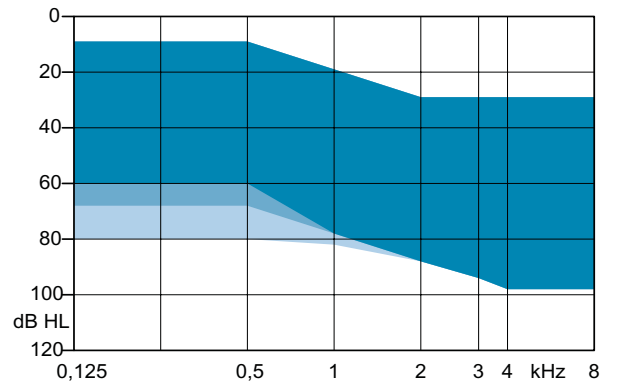
# Fitting Range

## S-Receiver



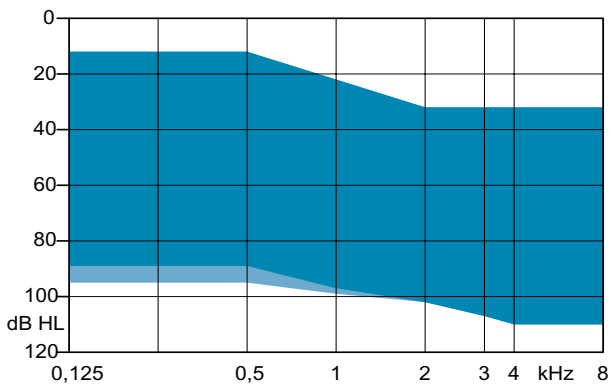
Open Click Domes  
 +  Closed Click Domes  
 +  +  Click Mold (no vent)

## M-Receiver



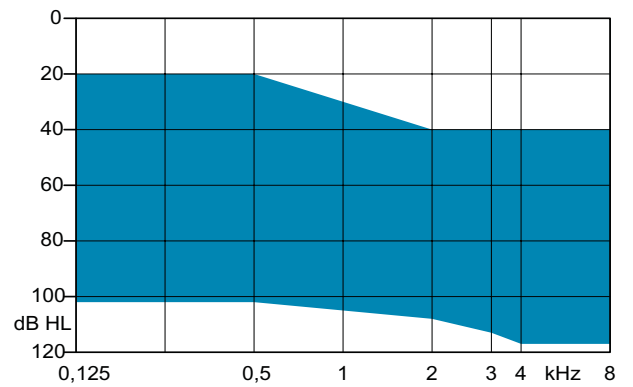
Open Click Domes  
 +  Closed Click Domes  
 +  +  Click Mold (no vent)

## P-Receiver



Double Click Domes  
 +  Click Mold (no vent)

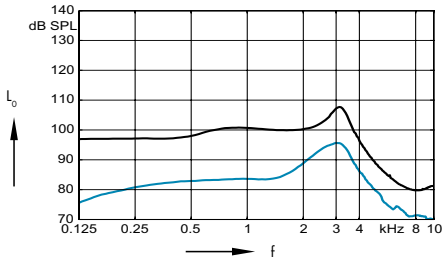
## HP-Receiver



Custom Shell (no vent)

# S-Receiver (Closed Click Dome) · Basic Data

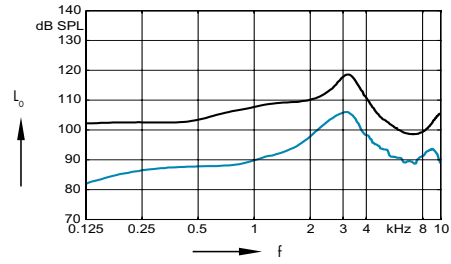
## 2 ccm coupler



Output sound pressure level  
( $L_i = 90$  dB)

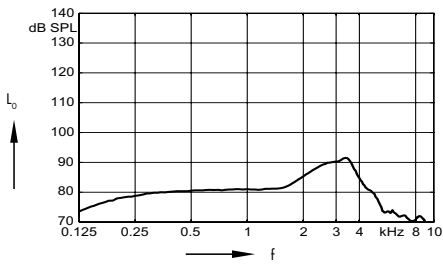
Full on gain  
( $L_i = 50$  dB)

## Ear simulator

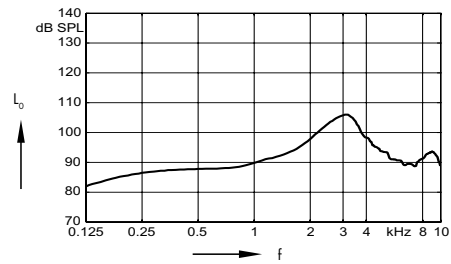


Output sound pressure level  
( $L_i = 90$  dB)

Full on gain  
( $L_i = 50$  dB)

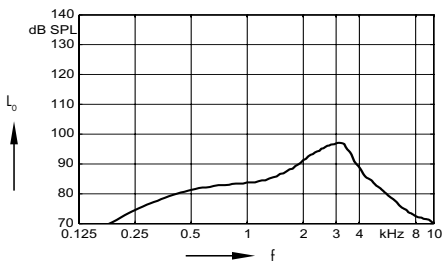


Frequency response  
( $L_i = 60$  dB)

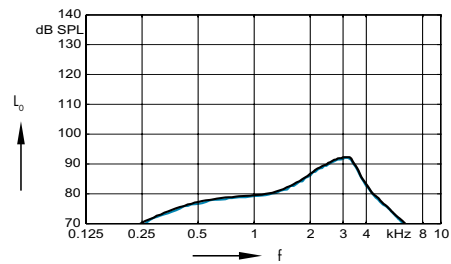


Basic acoustic response  
( $L_i = 60$  dB)

## Inductive response



Inductive response  
( $H = 10$  mA/m)

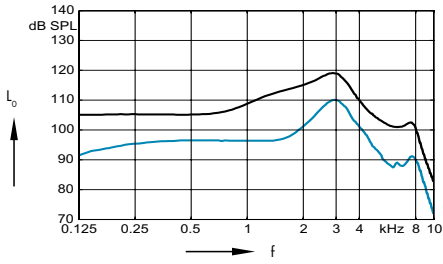


SPLITS curve left  
( $H = 31.6$  mA/m)

SPLITS curve right  
( $H = 31.6$  mA/m)

# M-Receiver (Closed Click Dome) · Basic Data

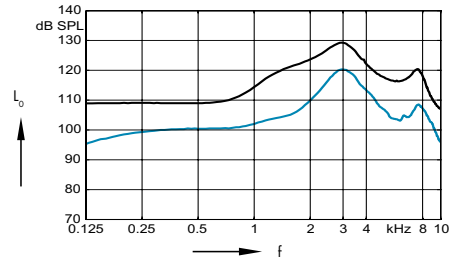
## 2 ccm coupler



Output sound pressure level  
( $L_i = 90$  dB)

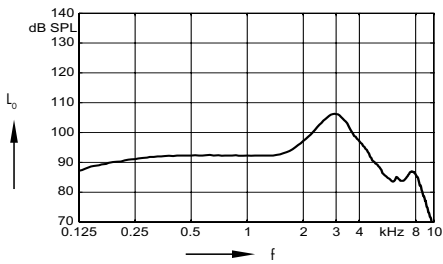
Full on gain  
( $L_i = 50$  dB)

## Ear simulator

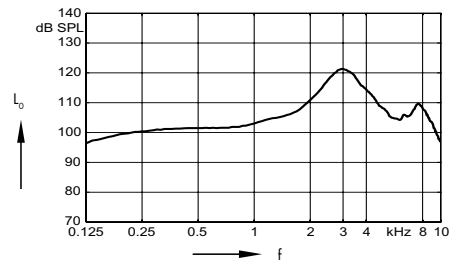


Output sound pressure level  
( $L_i = 90$  dB)

Full on gain  
( $L_i = 50$  dB)

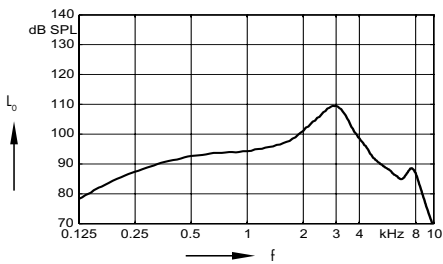


Frequency response  
( $L_i = 60$  dB)

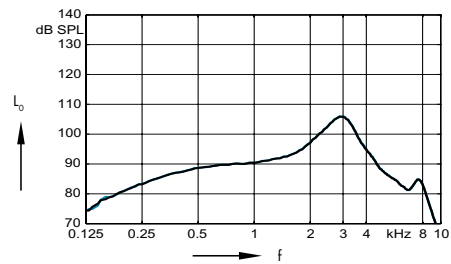


Basic acoustic response  
( $L_i = 60$  dB)

## Inductive response



Inductive response  
( $H = 10$  mA/m)

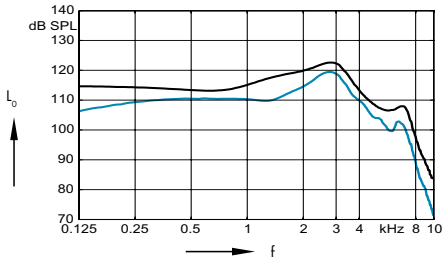


SPLITS curve left  
( $H = 31.6$  mA/m)

SPLITS curve right  
( $H = 31.6$  mA/m)

# P-Receiver (Click mold) · Basic Data

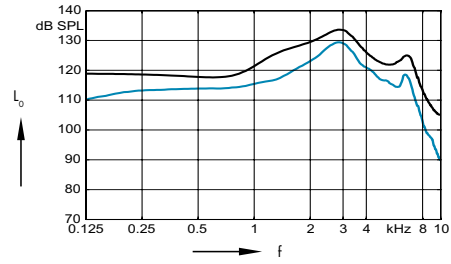
## 2 ccm coupler



Output sound pressure level  
( $L_i = 90$  dB)

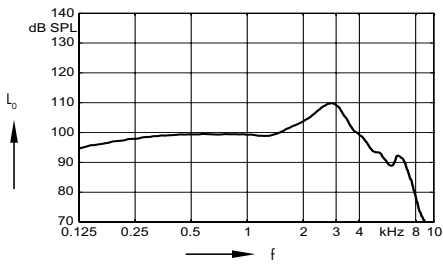
Full on gain  
( $L_i = 50$  dB)

## Ear simulator

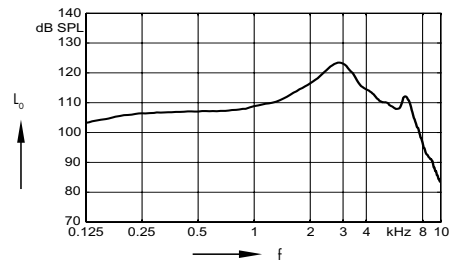


Output sound pressure level  
( $L_i = 90$  dB)

Full on gain  
( $L_i = 50$  dB)

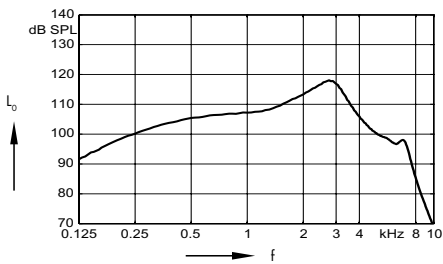


Frequency response  
( $L_i = 60$  dB)

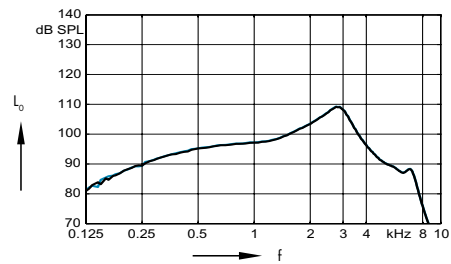


Basic acoustic response  
( $L_i = 60$  dB)

## Inductive response



Inductive response  
( $H = 10$  mA/m)

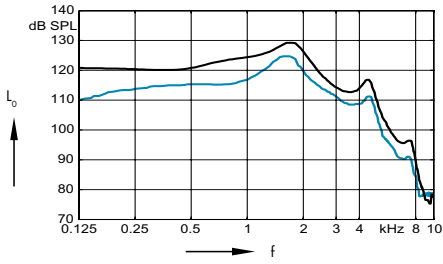


SPLITs curve left  
( $H = 31.6$  mA/m)

SPLITs curve right  
( $H = 31.6$  mA/m)

# HP-Receiver (Custom Shell) · Basic Data

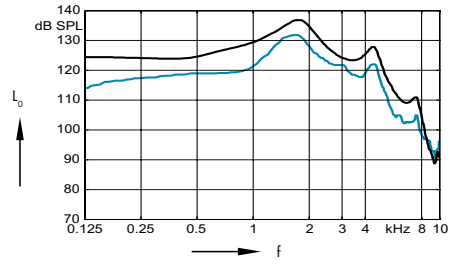
## 2 ccm coupler



Output sound pressure level  
( $L_i = 90$  dB)

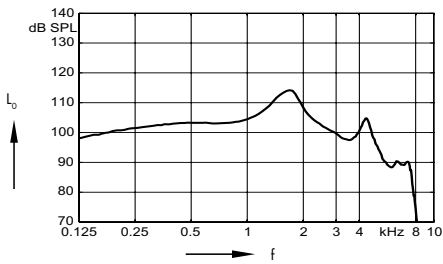
Full on gain  
( $L_i = 50$  dB)

## Ear simulator

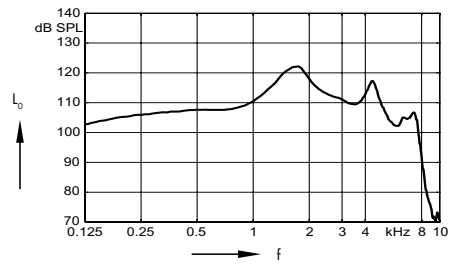


Output sound pressure level  
( $L_i = 90$  dB)

Full on gain  
( $L_i = 50$  dB)

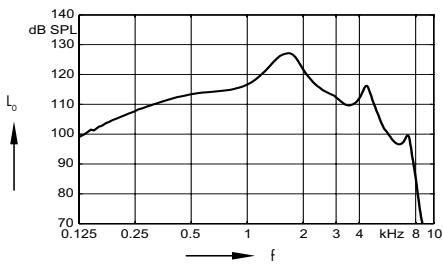


Frequency response  
( $L_i = 60$  dB)

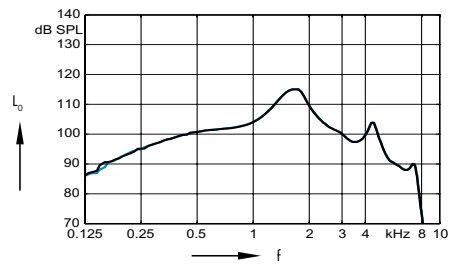


Basic acoustic response  
( $L_i = 60$  dB)

## Inductive response



Inductive response  
( $H = 10$  mA/m)



SPLITs curve left  
( $H = 31.6$  mA/m)

SPLITs curve right  
( $H = 31.6$  mA/m)



# Legato Li | Features and Accessories

TruCore Platform	
Signal processing (channels) / Gain/MPO (handles)	48 / 20
Hearing programs	6
Wireless Sync <sup>1)</sup>	P
Volume and control coupling <sup>1)</sup>	P
TruCore Speech	
HD Bandwidth	P
iFocus 360 <sup>1)</sup>	P
Focus 360	P
HD Directionality	P
Directional iLock <sup>1)</sup>	P
Voice Ranger	P
XPhone <sup>1)</sup>	P
Multichannel Adaptive Directional Microphone	P
Automatic Directional Microphone	P
Fixed Directional Microphone	P
Bandwidth Compression	P
Feedback Preventer	P
TruCore Sound Quality And Comfort	
Auto Volume <sup>2)</sup>	P
Microphone-Pattern adjustment <sup>1)</sup>	P
Reverb Reducer	P
Sound Radiance <sup>2)</sup>	P
Music Enhancer	P
Sound Locator	P
Sound Smoothing	P
Wind Noise Cancellation <sup>1)</sup>	P
Noise Management	P
TruCore Automatic Optimization	
Smart Automatic Equalizer	P
Smart Automatic Acclimatization	P
Automatic Classifier	P
Data Logging	P

<sup>1)</sup> Bilateral fitting required

<sup>2)</sup> Only in streaming mode, Smart Connect required

Performance levels: P= Premium H=High S=Standard

# Legato Li | Features and Accessories

Style Specific Features	
SecureTec protection	IP68
Telecoil	●
Autophone	●
Charging contacts	–
Battery Size	–
Battery door on/off function	–
Nanocoated housing	●
Audio streaming with Smart Connect	●
Instrument configurations	
Rocker switch / flat cover	– / –
Push button	●
Battery door - direct audio input	–
Battery door - child lock	–
Programming Accessories	
Flex connector	–
Programming pill	–
Programming adapter	●
Wireless programming with ConnexxLink™	●
Accessories	
Smart Connect™	○
Wireless CROS RIC	○
Smart Li-ion Power	mandatory
Smart Power™ charger	–
Smart Remote™	○
Smart Key	○
Smart Transmitter (req. Smart Connect)	○
Transmitter (req. Smart Connect)	○
Speech Connect (requires Smart Connect)	○
App	
Smart Connect App (requires Smart Connect)	○
Smart Remote App	○

● available ○ optional – not available



# Legato Li

## Abbreviations and Standards

### Abbreviations

The following abbreviations are used in this datasheet:

OSPL	Output Sound Pressure Level
HFA	High Frequency Average
FOG	Full-On Gain
MASL	Magneto Acoustical Sensitivity Level
SPLITS	Coupler SPL for an Inductive Telephone Simulator
RSETS	Relative Equivalent Telephone Sensitivity
AI-DI	Articulation Index - Directivity Index
IRIL	Input Related Interference Level
RTF	Reference Test Frequency

### Standards

- ▶ All measurements with the 2 ccm coupler were performed according to ANSI S3.22-2009 and IEC 60118-7:2005 if applicable.
- ▶ All measurements with an ear simulator were performed according to IEC 118-0/A1 and to DIN 45605 (frequency range) if applicable.
- ▶ The following ear pieces were used:
  - S-Receiver Unit and M-Receiver Unit: Closed Click Dome
  - P-Receiver Unit: Click Mold
  - HP-Receiver Unit: Custom Shell

### Note for power cell

- ▶ Operating times may vary due to hearing loss, use of binaural features and accessories, age of power cell as well as the sound environment.

The information in this document contains general descriptions of the technical options available, which do not always have to be present in individual cases and are subject to change without prior notice.

The required features should therefore be specified in each individual case at the time of conclusion of the respective contract.

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#### **WARNING**

Choking hazard posed by small parts.

- ▶ This instrument is not intended for the fitting of infants, children under 3 years and persons of mental incapacity.

#### **WARNING**

Instrument has an output sound pressure level of 132 dB SPL or more. Risk of impairing the residual hearing of the user.

- ▶ Take special care when fitting this instrument.