

ML15i for Phonak Spice+ H2O

Technical Data



ML15i features

- Dynamic FM
- Durable
- Automatic Frequency Synchronization (AFS) with WallPilot
- Direct Frequency Synchronization (DFS) with the inspiro or any other Phonak FM transmitter
- Intelligent stand-by mode to save power when the transmitter is switched off
- Fully programmable with FM SuccessWare

ML15i is the design-integrated Dynamic FM receiver for Phonak Spice+ H2O featuring a 13 battery. ML15i offers everything Dynamic FM encompasses. The hearing care professional can attach or remove an ML15i easily with just one pin.

ML15i together with any of Phonak Ambra M H2O, Phonak Solana M H2O, Phonak Cassia M H2O, Nios S H2O, Naida S CRT forms a powerful communication solution.



Relevant internet pages

Your online comprehensive FM support tool for schools
www.eSchoolDesk.com

Learn how to configure Phonak FM systems with different hearing instruments and/or cochlear implants
www.phonak.com/FM_configurator

Your online FM knowledge base
www.FMELibrary.com

Your online FM counseling support tool
www.FMCounselWare.com

ML15i for Phonak Spice+ H2O

General data

Type:	Dynamic FM receiver
Length:	12.4 mm
Width:	8 mm
Height (connected to HI):	8.5 mm
Weight:	0.9 g
Operating temperature range:	-10° C to +60° C

HF characteristics

Frequency range:	169.4 – 176 MHz (H-band) 214 – 220 MHz (N-band)
Frequency:	Multi-channel, quartz stabilized
Frequency stability:	Better than +/- 10 ppm
Modulation:	FM (narrow band)
Antenna:	Ear level FM antenna
Spurious emissions (EMC):	-57 dBm ERP
Sensitivity at E = 3 mV/m:	SINAD ≥ 15 dB
Selectivity at $\Delta f_{RX} = \pm 125$ kHz:	> 50 dB

Audio characteristics

Audio bandwidth:	100 – 6000 Hz
Distortion (THD):	< 2%
	Full quieting FM
	$f_{mod} = 1$ kHz
	$\Delta f = 5$ kHz
Audio signal output:	-40 to -70 dBV
	at $f_{mod} = 1$ kHz
	$\Delta f = 4$ kHz

Power management

Power supply:	Supplied by the HI battery	
Voltage range (extreme):	0.9 to 1.5 V	
Current drain:	Active mode	< 3 mA
	Sleep mode	< 580 μ A

Standards

Radiocom:	EN 300.422
EMC:	EN 60601-1-2 FCC part 15b
WaterResistant:	IP67*

*IP67 indicates that when connected to a compatible hearing instrument the ML15i was not damaged beyond repair after 8 hours in a dust chamber, nor after being immersed in 1 meter (3 feet) of water for 30 minutes as defined by IEC60529.

Dynamic FM System data for inspiro and Dynamic FM receivers

Adaptive FM Advantage (AFMA): (Ambient noise level ≥ 73 dB SPL)	
Dynamic FM advantage over the hearing instrument:	up to 25 dB
Dynamic FM advantage over a traditional FM system:	up to 15 dB
Voice Activity Detection (VAD):	
Attack time:	5 ms
Hold-on time:	5 seconds
Release time:	2 seconds
Voice off attenuation:	-26 dB
Wireless Dynamic FM:	
Frequency range:	Above the audio band
Operating range:	As FM operating range

Wireless programming and monitoring:	
FSK Link:	Frequency 40.96 kHz / Data rate 1000 – 2000 Bit/s Link from transmitter to the receiver
OOK Link:	Frequency 8.192 kHz / Data rate 1024 Bit/s Link from the receiver to inspiro
Operating range:	20 cm / 8 inches
MultiTalker Network*:	
Digital network for up to 10 transmitters	
Frequency: 2.4 GHz / Data rate 2 Mbits/s	
Operating range between the inspiro transmitters: 20 m	
* Also available if inspiro is used with traditional FM receivers.	