

# ML10i for Naída S UltraPower (UP)

## Technical Data



### ML10i features

- Dynamic FM
- AutoConnect
- Durable
- WaterResistant as the Naída UltraPower
- 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 4.01 or higher

**ML10i** is the tiny, design-integrated Dynamic FM receiver for Naída UltraPower. ML10i is like Naída completely WaterResistant. ML10i offers everything Dynamic FM encompasses. The hearing care professional can attach or remove an ML10i in no time just by taking out one pin.

ML10i for Naída S UP: together they form the most powerful communication solution for power users.

ML10i is also compatible with Naída UP, Naída UP Junior, Milo Plus UP, Milo UP and OK! Plus UP.



### Relevant internet pages

Your online comprehensive FM support tool for schools  
[www.eSchoolDesk.com](http://www.eSchoolDesk.com)

Latest set-up tips for FM systems in combination with hearing instruments and Cochlear implants.  
[www.phonak.com/FM\\_Configurator](http://www.phonak.com/FM_Configurator)

Your online FM knowledge base  
[www.FMELibrary.com](http://www.FMELibrary.com)

Your online FM counseling support tool  
[www.FMCounselWare.com](http://www.FMCounselWare.com)

# ML10i for Naída UltraPower

## Technical Data

### General data

Type:	Dynamic FM receiver
Length:	15 mm
Width:	9 mm
Height:	20 mm
Weight:	1.1 g
Operating temperature range:	-10°C - +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 +/-10ppm
Modulation:	FM (narrow band) Max. frequency deviation $\Delta f = 8$ kHz
Antenna:	Ear level FM antenna
Spurious emissions (EMC):	< 57 dBm ERP
Sensitivity at $E = 3$ mV/m:	SINAD $\geq 15$ 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 1.6 V	
Current drain:	Active mode	< 3 mA
	Sleep mode	< 510 $\mu$ A

### Standards

Radiocom:	EN 300.422
EMC:	EN 301.489
	FCC

### Dynamic FM System data

<b>Adaptive FM Advantage (AFMA):</b> (Ambient noise level $\geq 73$ dB SPL)	
Dynamic FM advantage over the Hearing instrument:	25 dB
Dynamic FM advantage over a traditional FM system:	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 sub-audio datalink:

Frequency range:	Above the audio band
Operating range:	as FM operating range

#### Wireless programming, monitoring and setting of FM Advantage:

FSK Link:	Frequency 40.96 kHz / Data rate 1000-2000 Bit/s Link from the transmitter to the receivers
OOK Link:	Frequency 8.192 kHz / Data rate 1024 Bit/s Link from the receivers to the inspiro
Operating range:	20 cm / 8 inches

#### AutoConnect\*:

Covered hearing instrument impedance:	1.0 k $\Omega$ - 20.0 k $\Omega$
---------------------------------------	----------------------------------

#### MultiTalker Network\*\*:

Digital network for up to 10 inspiro transmitters	
Frequency: 2.4 GHz / Data rate 2 Mbits/s	
Operating range between the inspiro transmitters:	8m

\* Also available if Dynamic FM receivers are not used with inspiro

\*\*Also available if inspiro is not used with Dynamic FM receivers