

Emergency communicator reference design

Enabling peace of mind in home care



For the elderly, the independence to live at home requires the confidence of knowing help is on hand when needed. By adding high-quality “voice anywhere” to the familiar alarm pendant concept, Dialog’s emergency communicator reference design enables reassuring assisted-living services that mean wearers are only ever a button-press away from a friendly voice.

Given the choice, most people would prefer to spend their twilight years at home. Pendant alarms make this possible by allowing users to alert carers or family members of incidents such as a fall at the press of a button. Part of the SmartPulse™ family, the emergency communicator reference design extends this concept by adding high-quality “voice anywhere”. If the wearer has an accident, they press their pendant button and can immediately talk to a designated contact. Incidents can thus be assessed more accurately, and the appropriate response taken faster.

The reference design helps home care providers quickly develop new assisted-living services. It also enables rapid prototyping of associated devices and a smooth transition to manufacturing.

Comprising a battery-powered pendant and an internet-enabled basestation, the system uses proven DECT technology. DECT’s long range ensures the wearer can contact help from anywhere in their house or garden. Outstanding voice quality is perfect for users with hearing difficulties. Plus proven interference-free operation brings the peace-of-mind of knowing your call will be connected every time. What’s more, the pendant offers typical standby times of around 300 hours and talk times of over 10 hours, so is ready for use whenever needed.

But most of all the system brings ease of use. With built-in VoIP capabilities, the basestation requires no installation. Just plug it into an internet router, and it spontaneously finds and establishes a secure connection with the server. Provider- or region-specific settings such as which number to call can be downloaded automatically. As a SmartPulse™ product, the basestation also supports DECT ULE. So service offerings can be easily extended by adding additional wireless devices (such as security alarms or door phones) to the network.

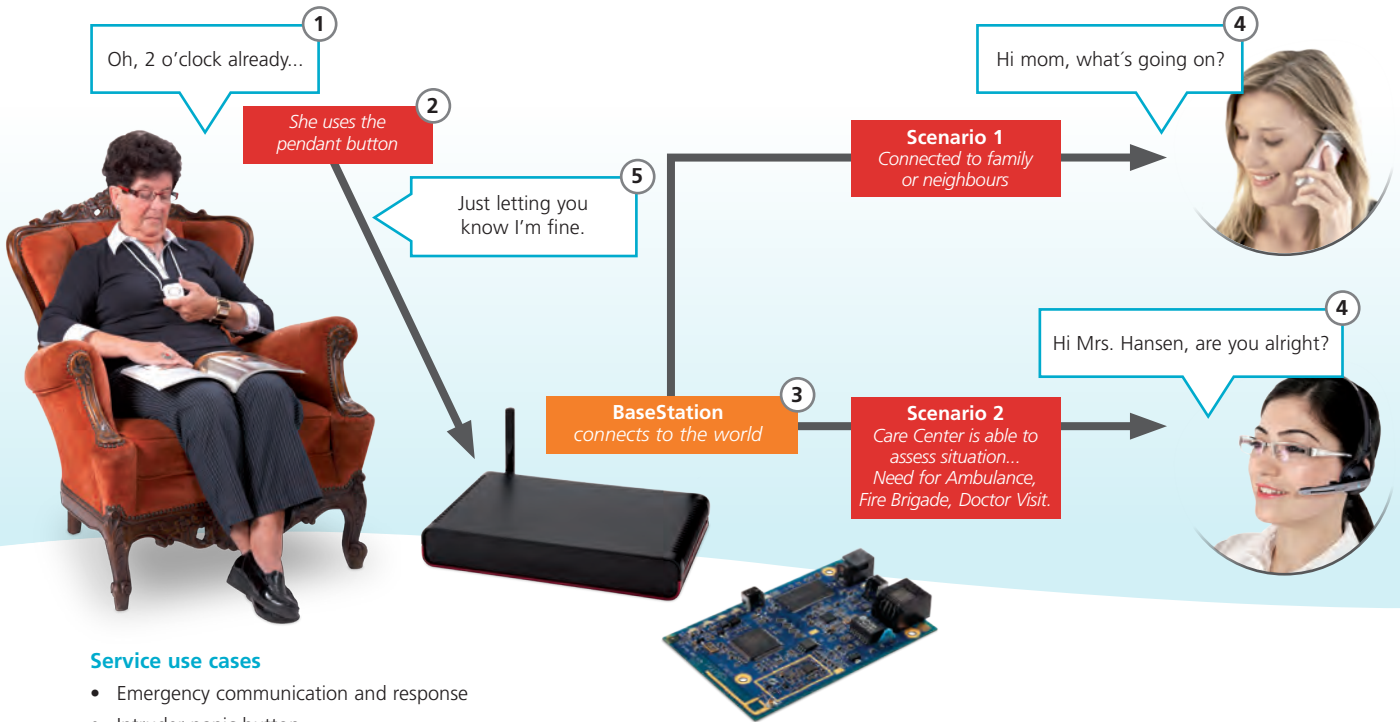
Benefits

- Easy to install and use
- Complete house-and-garden coverage
- Can support combined voice and data
- “Voice-to-internet” solution allows service providers to focus on backend
- Small form factor
- Production ready

Features

- Complete reference design for home care emergency communicators
- 300 hours standby time and 10 hours talk time (typical)
- Range of over 100 m indoors
- High-quality HD voice ideal for hearing impaired elderly users
- Interference-free operation
 - Operates in dedicated frequency band
 - Automatic, dynamic channel selection
- Supports VoIP and internet-based tele-healthcare services

Assisted-living application overview



Service use cases

- Emergency communication and response
- Intruder panic button
- Medication reminders
- Activity tracking
- Healthcare monitoring

Potential hardware options

- Assisted-living emergency communicator
- Fall detection
- Waterproof casing

Wireless networking extensions

- Door phones
- Doorlocks
- Intruder alarms
- Programmable medication dispensers
- Heating and lighting controls
- Home automation controls



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