



RTX TEAMENGAGE

ADVANCED TEAM INTERCOM SOLUTION
BASED ON RTX1090 DECT MODULE
PRODUCT SHEET

RTX TeamEngage™ is an advanced team intercom solution for industries where reliable communication, despite environment, is paramount.



ADVANCED TEAM INTERCOM SOLUTIONS

WHEN COMMUNICATION AND FREEDOM OF MOVEMENT MATTER

Solving complex tasks or handling critical situations often depends on direct, clear, and reliable communication. TeamEngage™ is a wireless communication solution for scenarios where direct and reliable two-way communication or to broadcast information is critical for getting the job done.

By providing excellent audio and radio performance, the TeamEngage solution offers high-quality communication for both portable and installed systems which also adds security for the individual. This means that TeamEngage fits your needs, whether your team is working within a confined geographical area or a wide area having the team split up.

The TeamEngage solution is available on the RTX1090 module - a small form factor module designed for flexibility and durability to accommodate many different product implementations. So, whether the product is placed on a shirt, belt, or a headset, the RTX1090 module fits the user's needs.

DEPLOYMENT OPTIONS

The TeamEngage solution offers three deployment options: Dynamic, Singlecell, and Multicell - each providing a different system depending on the user scenario.

TEAMENGAGE DYNAMIC

TeamEngage Dynamic is a self-establishing intercom system that works independently and without geographical boundaries. Teams can split up into smaller groups and establish their own communication groups ad hoc. This novel solution removes the challenges of two-way radios and traditional star-topology networks, which requires the users to roam around fixed base stations.

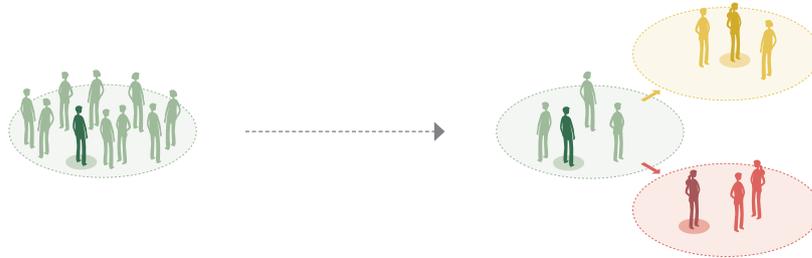


Illustration 1: RTX TeamEngage Dynamic

TEAMENGAGE SINGLECELL

In a fixed geographical area or in reach of a portable base station, the TeamEngage Singlecell system offers intercom for up to 10 active users, or 11 where one user acts as a portable base station. A fixed- or portable base station can enable the establishment of up to five groups, in which the user can join one or more of the groups (additional listeners can be added as an option).

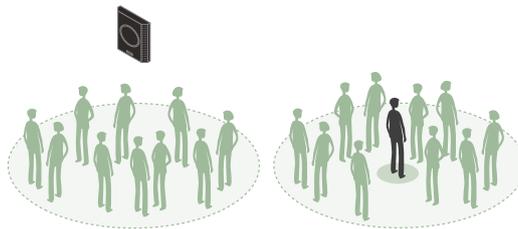


Illustration 2: RTX TeamEngage Singlecell

TEAMENGAGE MULTICELL

For a larger geographical coverage, TeamEngage offers a Multicell system with two or more base stations. Each base station supports up to 10 active users.

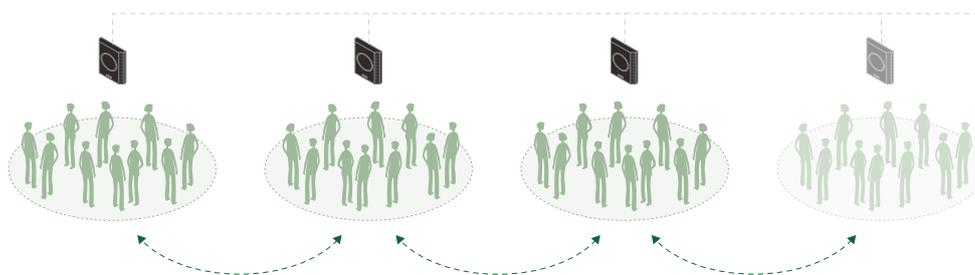


Illustration 3: RTX TeamEngage Multicell

Providing basic roaming, users can roam between base stations while continuing the communication. The Multicell system optionally allows additional 'listen only per default' units, and these units can be assigned the communication groups as per normal procedure.

TECHNOLOGY AND MANUFACTURING

OUTSTANDING AUDIO QUALITY

TeamEngage utilizes wideband audio, and when compared to other solutions in the market, provides a much wider frequency range including frequencies from 50 to 7000Hz. The ability to include frequencies below 100Hz further makes TeamEngage stand out as delivering outstanding voice clarity, even when operating in noisy and/or rugged environments. Because of these capabilities, TeamEngage emerges as a breakthrough when compared to the team intercom systems available today.

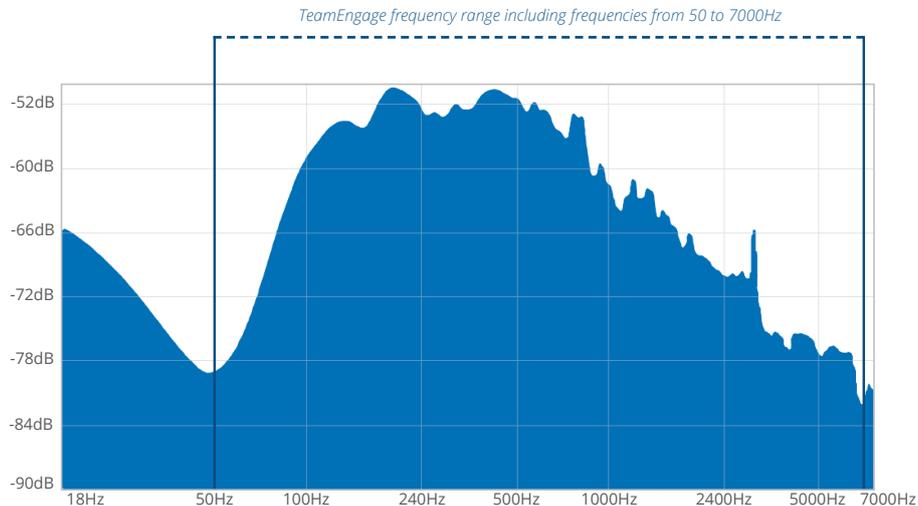


Illustration 4: Frequency content from 100 different people

MANUFACTURING INTEGRATION

The TeamEngage software will be delivered for deployment on the RTX1090 module. This provides several options for commercialization and hardware and software customization, securing your design language and product signature.

MODULE IN A HOSTED MODE

With the addition of a host processor for customization of the user interface, RTX can offer the module in a hosted mode with recommended host designs and sample source code, for a quick go-to-market.

OWN HARDWARE DESIGN

RTX can provide a reference design which will provide the foundation for your own product. This will include the integration of the module itself, the host processor, and other adjunct peripherals, such as Bluetooth Low Energy (BLE) and Bluetooth Classic.

EVALUATION KIT (EVK)

For early evaluation of your own product idea, RTX can provide an EVK to quickly jump-start your product development. This allows the connection from the EVK to your host processor, eliminating the need to first create a design around the module.

PRODUCTION AND COMMERCIALIZATION

RTX can undertake the production and commercialization of the product to be brought to market. RTX manufactures over 1 million products a year with a stellar record of almost zero manufacturing defects. From conception to commercialization, RTX can help bring products to market quickly and efficiently.

TECHNICAL SPECIFICATIONS

SUPPORTED RADIO COMPLIANCE	SPECIFICATIONS
EU, US, JAPAN STANDARDS PER DEFAULT	<ul style="list-style-type: none"> See the RTX1090 DECT communication module datasheet
FEATURES	SPECIFICATIONS
RADIO	<ul style="list-style-type: none"> 1.9GHz DECT with radio bandpass filtering for enhanced resilience - a protected but license free frequency band in most regions
OPERATION RANGE	<ul style="list-style-type: none"> Indoor: 20-50 meters Outdoor: Up to 300+ meters <i>Range depends on actual product design and environment</i>
OPERATION TIME	<ul style="list-style-type: none"> Average power consumption of RTX1090 module in TeamEngage Dynamic operation: ~80mA
STD DIGITAL INPUT/OUTPUT (MODULE)	<ul style="list-style-type: none"> 16bit, 16kHz sample rate
AUDIO CODEC	<ul style="list-style-type: none"> Wideband audio. Full duplex audio communication with codec latency down to 15ms, 16bit CRC
AUDIO FREQUENCY RANGE	<ul style="list-style-type: none"> 50-7000Hz
QoS	<ul style="list-style-type: none"> Antenna diversity (dual antennas) Radio equalizer Dual slot diversity (redundant audio-data transmission)*
ACTIVE NOISE CANCELLATION (ANC)	<ul style="list-style-type: none"> Optional
ECHO CANCELLATION	<ul style="list-style-type: none"> Optional
ORDERING DETAILS	DESCRIPTION
TEAMENGAGE (PATENT PENDING) PRODUCT SOLUTION	Contact RTX for more details at sales@rtx.dk

**Specific for TeamEngage Dynamic*