



RTX

TEAMENGAGE™ SINGLE- AND MULTICELL

PORTABLE OR FIXED TEAM INTERCOM SOLUTIONS

PRODUCT SHEET

RTX TeamEngage™ Single- and Multicell is a team intercom solution which allows you to realize products for industries, where secure and reliable communication is paramount.

Version no. 003

CLEAR AND SECURE COMMUNICATION

TeamEngage Single – and Multicell solution provides clear and secure communication with simple deployment for professionals in multiple industries. TeamEngage Single– and Multicell is about targeted communication, allowing the message to get passed on clearly to a relevant user, or one or more groups of users.

With the Singlecell option, users can communicate with each other when within range of a fixed or portable base station, while the Multicell option allows for multi-location deployment of base stations. The TeamEngage Single– and Multicell solution is based on a star radio network topology i.e., all units of the system connect to a central device, thus depending on one or more designated base stations.

TeamEngage Single- and Multicell solution is enabled on both the standard RTX1090 module and the RTX1090R1 variant. The RTX1090R1 module is a variant with an extended temperature and vibration range. This makes it ideal for solutions used in outdoor and harsh environments.



KEY FEATURES

- **AUDIO MIX**
With the TeamEngage Single- and Multicell design, you are allowed full flexibility to mix the individual audio streams in the way that meets your specific product needs.
 - **RADIO EQUALIZER**
For improved operation in harsh reflective environments, the TeamEngage solution optionally features a patented radio equalizer. A diversity receiver technology specifically designed to reduce sensitivity to multipath radio reflections, thus improving signal robustness.
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For more information on TeamEngage intercom solutions, please refer to our TeamEngage family brochure.

TWO OPTIONS

TEAMENGAGE SINGLECELL

TeamEngage Singlecell offers a group intercom solution for multiple users. The solution allows up to 14 or 15 simultaneous talkers (+ multiple listeners) depending on the chosen configuration. Additional users can optionally be assigned as listen only. The solution supports flexible mixing of the audio streams thus allowing creation of communication groups.

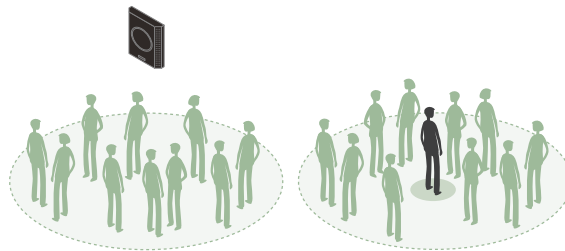


Illustration 1: TeamEngage Singlecell with fixed or portable base station

TEAMENGAGE MULTICELL

TeamEngage Multicell offers a group intercom solution with two or more base stations, where each base station supports the same number of talkers as the fixed Singlecell base station.

Providing basic handover, users of this solution can roam between base stations while continuing the communication. The solution supports flexible mixing of the audio streams thus allowing creation of communication groups across the entire network.

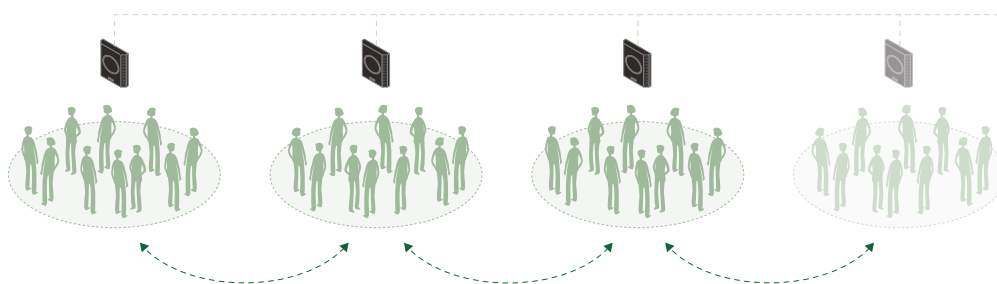


Illustration 2: Expandable TeamEngage Multicell system with roaming between cells

TECHNICAL SPECIFICATIONS

SUPPORTED RADIO COMPLIANCE	SPECIFICATIONS
EU, US, JAPAN STANDARDS PER DEFAULT	Please refer to the datasheet on RTX1090/RTX1090R1 DECT communication module
FEATURES	SPECIFICATIONS
RADIO	1.9GHz DECT with radio bandpass filtering for enhanced resilience. Regions supported but not limited to EU, US, Japan
OPERATION RANGE	Indoor: 20-50 meters Outdoor: Up to 300+ meters <i>Range depends on actual product design and environment</i>
HANDOVER BETWEEN BASE STATIONS (MULTICELL)	<1 seconds (for seamless handover solutions, contact RTX)
OPERATION TIME	Average power consumption of RTX1090 module in TeamEngage Singlecell operation: ~47mA
STD DIGITAL INPUT/OUTPUT (MODULE)	16bit, 16kHz sample rate
AUDIO CODEC	Default wideband audio codec. Full duplex audio communication with codec latency down to 15ms. Design allows for codec of choice.
AUDIO FREQUENCY RANGE	50-7000Hz (default codec)
ACTIVE NOISE CANCELLATION (ANC)	Optional
ECHO CANCELLATION	Optional
QoS	Antenna diversity (dual antennas) Radio equalizer
LATENCY	Latency <25ms (no lip sync issues)
ORDERING DETAILS	DESCRIPTION
TEAMENGAGE™ SINGLE- AND MULTICELL PRODUCT SOLUTION	Contact RTX for more details at sales@rtx.dk