

robots that inspire

from professional mobile platforms to complete service robot applications



Source: Metro Group



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Agenda

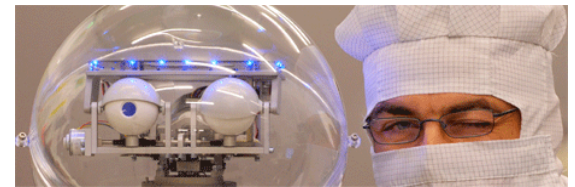
- Applications
- Technology
- Benefit to the ECHORD project

- Retail sector
 - Shopping robot **Toomas** (Toom Baumarkt GmbH)
 - Innovation guides **Ally and Roger** in the Real-Future-Store (Metro)
 - Market research
 - Sales promotion at the POS



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- Industrial sector
 - Measurement and inspection robot (e.g. Infineon's **I2D2** robots)
 - Mobile camera for remote inspection
 - Mobile handling and manipulation
 - Dynamic transport applications



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- Research sector
 - Developments in the fields of navigation, localization, human-robot-interaction, mobile manipulation, RFID-localization, long-life-learning



- Robot Platform
 - Differential driven platform for indoor usage
 - 582mm x 737mm x 617mm (H x L X W)
 - Weight 60kg, payload 50kg
 - Battery capacity up to 2030Ah
 - Autonomy up to 20 hours
 - Integrated Mini-ITX motherboard, Intel Core™ Duo 2.0 Ghz, optional two additional on-board embedded PCs
 - CE conform, TÜV certified

- Additional Equipment
 - Adaptable to Schunk PowerCube-Modules by plug-and-play
 - Additional sensor systems
 - SCITOS Human-Machine-Interface
 - SCITOS Robot-Head



- Technically
 - Robust mobile robot platform
 - Adaptable to the required needs of research application
 - Wide variety of add-ons
 - Available software modules for localization, navigation, obstacle avoidance, tracking and interaction

- Operationally
 - Stronger focus on project goals
 - Usage of validated software and hardware modules
 - Exchange of experiences from other applications
 - Excellent technical support
 - Young and highly innovative team

