Unmanned Systems
EOD robots

The most important thing we build is trust
The EOD robot tEODor

Distance means safety

This basic rule with regard to disarming explosive devices means that bomb disposal officers increasingly prefer EOD robots as their tool of choice.

The Telerob Explosive Ordnance Disposal and observation robot sets the standard worldwide. Robust, reliable and flexible in use, the innovative bomb disposal system provides a maximum degree of safety and protection.

More than 400 units in 41 countries help daily to prevent harm to people and the environment. A total of 20 NATO countries place their trust in the superior reliability of the most widely sold EOD robot of recent years.

The highlights:

- Programmable 6-axis manipulator with linear axis
- Magazine for three additional EOD devices, with automatic tool change
- Parallel operation of up to five firing systems with a maximum of ten separate shots
- Universal interfaces to connect to all current firing systems
- Built-in diagnostic system with remote maintenance module
- Long list of accessories (more than 40 systems and devices)
- Can be used under all ambient conditions from –20°C to +60°C
The EOD robot tEODor

Technical Data

Vehicle
Length / Width / Height: 1300 / 685 / 1240 mm
Weight: 375 kg
Speed (infinite): max. 3 km/h
Climbing ability*: 45°
Turning circle: 1460 mm
Payload: 350 kg
Towing capacity: 3000 N
Reach vertical / horizontal: 2860 / 1860 mm

Manipulator
Turret rotation: ± 205°
Upper arm incline: +14°, -85°
Lower arm incline: ± 110°
Lower arm extension: 0 - 300 mm
Gripper incline: ± 120°, -95°
Gripper rotation: ± endless
Gripper open/close: 300 mm
Gripper force: 600 N

Control panel
Width / Height / Depth: 440 / 350 / 310 mm
Weight: 9 kg

*Depending on ground and friction. Trained operators under ideal conditions may achieve even more by using specific arm configurations.
**Spare parts package electronic**
No. 304460

**Spare parts package mechanical**
No. 303718

**Spare parts package batteries**
No. 301624

**LIN**
Freezing system
No. 304690

**Sensor platform**
No. 306016

**Sensors:**
- GPS
- X-am 7000
- RadEye-PRD
No. 305350

**Other sensors upon request**

**Transport container Robot**
No. 207031

**Transport container Control station**
No. 207030

**Automatic hitch**
No. 304027

**Fiber optic cable light**
manual rewind
No. 305528

**Fiber optic cable**
automatic rewind with integrated tool magazine
No. 305519

**2-way audio**
Receiver
No. 305743

**Twin camera**
No. 305576

**Ignition cable drum**
No. 207101

**Holder PAN**
No. 305567

**BENELLE M4**
Super 90
No. 305748

**Holder RE 70 M3 Plus**
No. 304520

**Holder RE 700**
180WC-71
No. 79270

**Holder PAN**
No. 305567

**Digital video**
Transmitter
No. 305582

**Electronic**
No. 302490

**Fiber optic cable light**
manual rewind
No. 305528

**X-ray mounting frame**
XR150, XR200 or XRS3
No. 305318

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XR150, XR200 or XRS3
No. 305319

**Car-towing device**
No. 210065

**Ramp (foldable)**
No. 205364

**Large gripper**
No. 206252

**PIT night vision camera**
No. 305770

**Digital video**
Transmitter
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The EOD robot telemax

Sometimes less is more

This basic principle applies with special force if the situation involves working in confined spaces.

In all cases where the big robot EOD or cannot be used its little brother telemax provides that vital distance between the bomb disposal engineer and the explosive device that can mean the difference between life and death in aircraft, in subways, in buses or other means of public transport.

The highlights:

- Programmable manipulator with Tool Center Point control
- Excellent mobility through 4-track running gear with DRIVE technology
- 7-axis manipulator with rotating turret and linear axis
- Very high reach through the telescope and chassis that can be adjusted for height
- Two tool magazines with automatic tool change
- IATA-conforming Li-ion battery system (in compliance with UN 38.3)
- Interfaces for AQUASET, ABL 2000, PROPARMS 12.5 RC, PROPARMS 20 RC, RE 70 M3, RE 12g Mini, BENELLI M4 Super 90, NEEDLE and DemiMod
- Universal charger with intelligent battery management for Li-ion and NiMh technology
- Hybrid drive featuring fuel cells for long endurance missions
The EOD robot telemax

Technical Data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length:</td>
<td>800 mm*</td>
</tr>
<tr>
<td>Width:</td>
<td>400 mm*</td>
</tr>
<tr>
<td>Height:</td>
<td>750 mm*</td>
</tr>
<tr>
<td><strong>Vertical reach</strong></td>
<td>1955 mm (2 400 mm) + 290 mm telescope</td>
</tr>
<tr>
<td><strong>Horizontal reach</strong></td>
<td>1530 mm + 290 mm telescope</td>
</tr>
<tr>
<td><strong>Gripper payload</strong></td>
<td>5 kg</td>
</tr>
<tr>
<td><strong>Speed</strong></td>
<td></td>
</tr>
<tr>
<td>Standard speed version</td>
<td>4 km/h (track)</td>
</tr>
<tr>
<td>High speed version</td>
<td>10 km/h (wheel)</td>
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<tr>
<td><strong>Climbing ability</strong></td>
<td>45°</td>
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<tr>
<td><strong>Obstacle ability</strong></td>
<td>500 mm</td>
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<tr>
<td><strong>Ambient conditions</strong></td>
<td>T: -20 to +60°C</td>
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<tr>
<td></td>
<td>Protection: IP 65</td>
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<tr>
<td><strong>Two men portability acc. to MIL STD 1472E</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Chassis</strong></td>
<td>4-track system, <em>DRIVE</em> Technology optional 4 wheels</td>
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<tr>
<td><strong>Power</strong></td>
<td>Battery NiMh 17Ah</td>
</tr>
<tr>
<td></td>
<td>Battery Li-ion 40Ah</td>
</tr>
<tr>
<td></td>
<td>Battery Li-ion 13.2 Ah</td>
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<tr>
<td><strong>Operation time</strong></td>
<td>approx. 2-4 hours</td>
</tr>
</tbody>
</table>

*Stowed position

Subject to change without notice!
One of the biggest challenges when protecting critical infrastructure is to deal with a potential threat from a “dirty bomb.” A “dirty bomb” is the term used to describe the result of adding radioactive, biological or chemical materials to an improvised explosive device. An explosion in urban areas in particular or in other sensitive areas of modern life would be disproportionately more severe due to the added substances being spread around.

Currently there are only very few systems in the world which can deal effectively with threats of this type. The armoured “Spürfuchs” vehicle that is used by the military is still the best known example. It can investigate CBRNE threats, initiate countermeasures and provide the highest possible degree of protection to the security personnel.

**TEL600 NBC systems** make use of this military capability for the first time in a civilian service vehicle. And they go another step further, a very big step.

EOD, chemical warfare and vehicle experts developed our special vehicles specifically to meet the challenge of finding a way to deal with a biological component. Using a glove box that is accessible from outside, you can identify the ten most commonly used and most dangerous biological agents directly after taking samples and right at the location concerned by means of suitable rapid tests.
A world first and still unique is that our TEL600 NBC vehicles can take the samples by using an NBC robot that operates completely independently. The NBC robot is controlled from the interior of the NBC vehicle. The latter has a filter unit and maintains an internal overpressure so that the security forces concerned do not need to leave the vehicle. At the same time, the unmanned reconnaissance system can also be used as an EOD robot and so prevent the detonation of improvised explosive devices.

Measuring equipment from the Bruker company (RAID, RAPID and EMC) that is already well known from its use in the Spürfuchs can quickly detect toxic or chemical adjuncts and feed the data into a computer-supported network of sensors in the NBC vehicle.

Using the NATO-certified analysis software from Bruhn Newtech, the data is combined with the meteorological measurements from the weather station, which is likewise integrated in the NBC vehicle, and thus a realistic hazard portfolio can be generated. A built-in video link then transfers the future propagation scenarios to the mobile or stationary operations center. The corresponding decisions can be made there and the appropriate countermeasures taken.