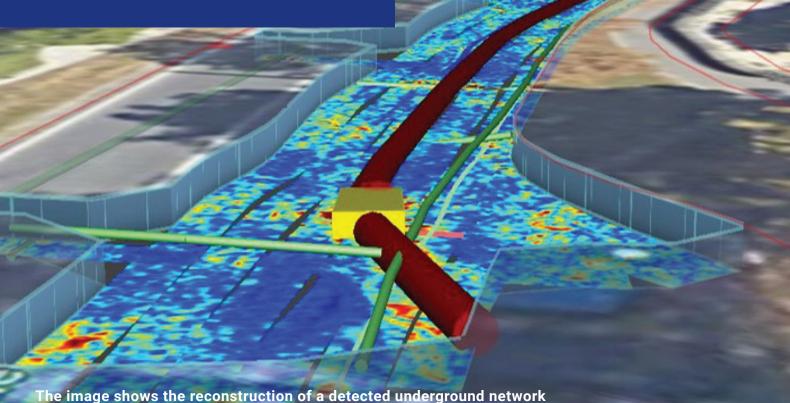
GEORADAR EXPLORER 3.0



Tesmec Georadar Explorer 3.0 is a Ground Probing Radar - GPR - which detects underground utilities, optimizing trenching and laying operations.

This system has been developed to guarantee the safety of trenching work sites and to increase operational speed, avoiding utilities strike incidentes. Utilizing Explorer 3.0 reduces risks and costs by providing non destructive surveying to locate underground networks.

The 3.0 system has been reduced in size, making it easier and more practical. The new brackets lock and stabilize the antenna during acquisition, facilitating its movement. All the electronics, including the Control Unit, are inside the antenna box, which has been reduced in size and weight. The new lithium batteries, reduced in size and weight, replace the previous lead - acid batteries and guarantee a longer service life.

TECHNICAL DETAILS

- Reconstruction of any kind of underground networks
- Detection depth: up to 4,0 m
- Automatic Georeferenced data
- User friendly data aquisition software
- Two configurations: vehicle pulled "mobile" and hand pushed "trolley"
- Trolley configuration acquisition speed: 4.000-5.000 sqm/day
- Mobile configuration acquisition speed: 15.000-20.000 sqm/day







SYSTEM SPECIFICATIONS METRIC

US

| Sensor frequency | 200 - 1000 Mhz | 200 - 1000 Mhz |
|------------------------|-----------------------------|-------------------------|
| Weight | 42 KG | 92 pounds |
| Scan width | 82.5 cm | 32" |
| Number of channel | 30 (19VV - 11HH) | 30 (19VV - 11HH) |
| VV channels spacing | 4.3 cm | 1.7" |
| HH channels spacing | 7.5 cm | 2.9" |
| Power consumption | | |
| Acquisition | 19 W | 19 W |
| Stand-by | 15 W | 15 W |
| Max operating time | 8H (can be extended) | 8 hrs (can be extended) |
| Environmental | IP65 | Waterproof |
| Max. acquisition speed | 14 km/h | 8.7 mph |
| Temperature range | -20 C° / 50 C° | - 4° F/ 122° F |
| Scan step resolution | 4 cm | 1.5 " |
| Positioning | Integrated Encorder and PPS | |
| | External GPS and TPS | |
| Certification | EC, FCC, IC | |
| | | |

SOFTWARE SPECIFICATIONS

| Umap - Acquisition | software |
|--------------------|----------|
|--------------------|----------|

| Automatic calibration for an easy and quick start-up | |
|---|--|
| Visualization and storage of antenna array data set (30 channels) | |
| Visualization of radar tomography (time slices) | |
| Connection with NMEA positioning device | |
| Multilanguage support | |
| Metric and imperial units | |
| IQMaps - Processing software | |
| A start of the set of | |

Automatic calibration for an easy and quick start-up



Explorer 3.0 – vehicle pulled in "trolley" configuration



Explorer 3.0 – vehicle pulled in "mobile" configuration



The image shows the reconstruction of a detected underground network

