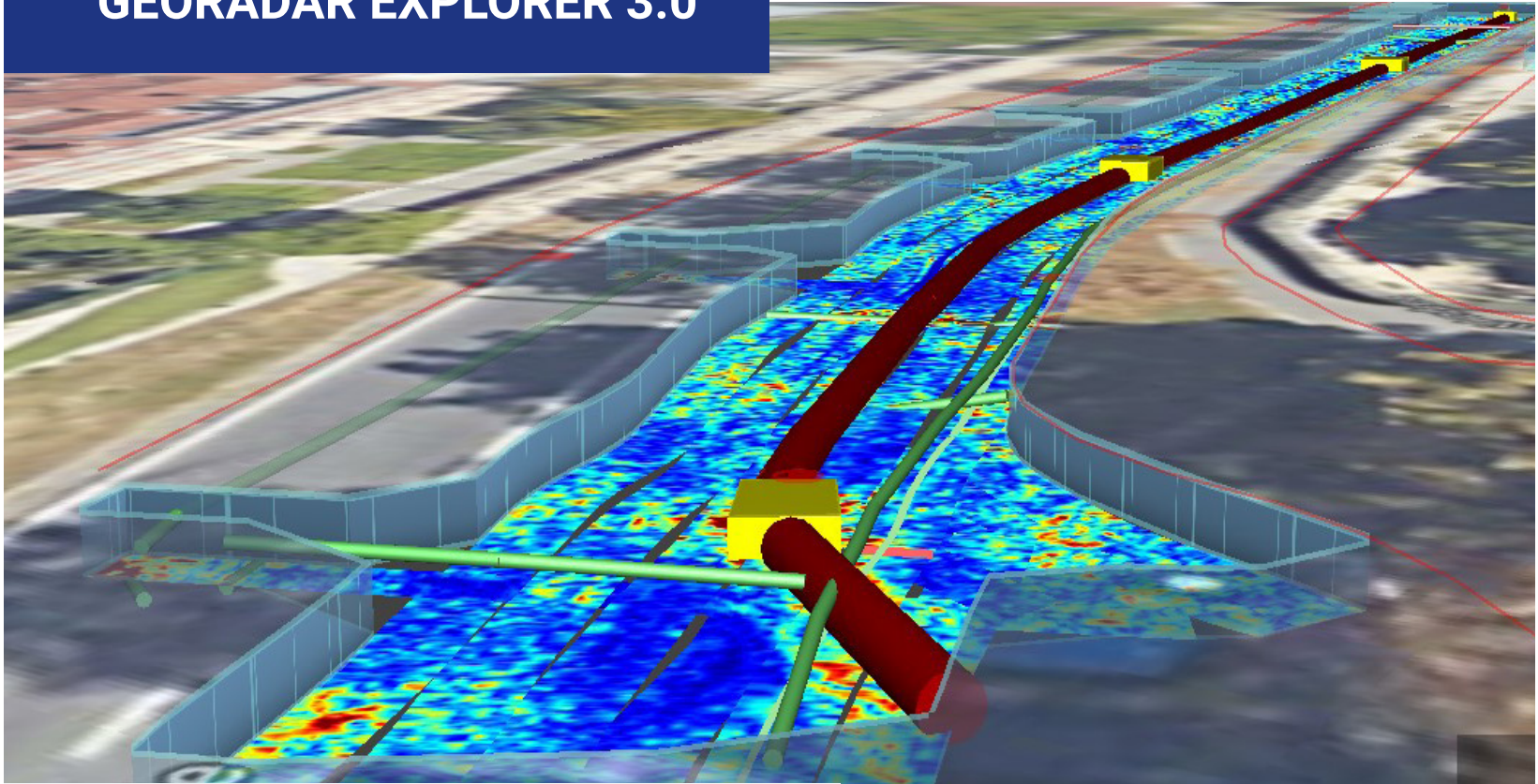# GEORADAR EXPLORER 3.0

**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 side systems lock and stabilize the antenna during acquisition, facilitating its movement. All the electronics, including the Control Unit (DAD), 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.
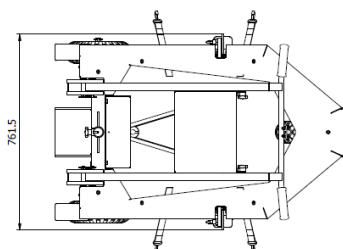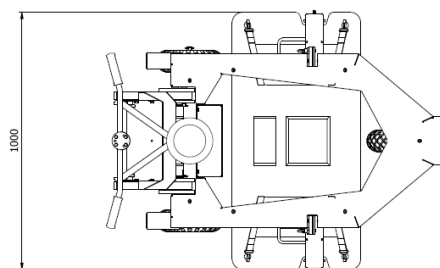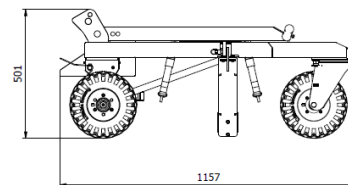
## TECHNICAL DETAILS
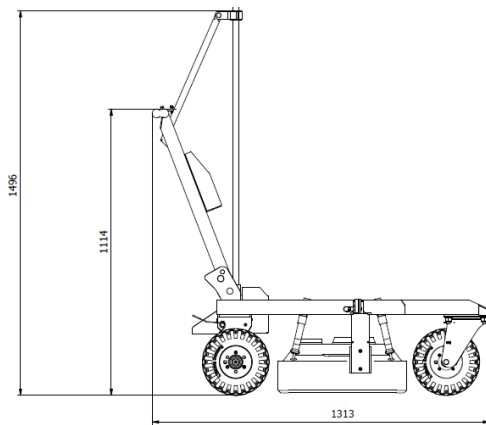
- Reconstruction of any kind of underground networks
- Detection depth: up to - 4,0 m
- Automatic Georeferenced data
- User friendly data aquisition software
- Two configurations: vehicle pulled "mobile" and hand pushed "trolley"
- Trolley configuration acquisition speed: 4.000-5.000 sqm/day
- Mobile configuration acquisition speed: 15.000-20.000 sqm/day

# TESMEC
*draw the way forward*

## SYSTEM SPECIFICATIONS

| SYSTEM SPECIFICATIONS | METRIC | US |
|---|---|---|
| **Sensor frequency** | 600 MHz | |
| **Weight** | 42 KG | 92 pounds |
| **Scan width** | 82.5 cm | 32" |
| **Number of channel** | 30 (19VV - 11HH) | |
| VV channels spacing | 4.3 cm | 1.7" |
| HH channels spacing | 7.5 cm | 2.9" |
| **Power consumption** | 120 L | 31.7 gal |
| Acquisition | 19 W | |
| Stand-by | 15 W | |
| **Max operating time** | 8H (can be extended) | |
| **Environmental** | IP65 | |
| **Max. acquisition speed** | 14 km/h | 8.7 mph |
| **Positioning** | Integrated Encorder and PPS | |
| | External GPS and TPS | |
| **Certification** | EC, FCC, IC | |
| **Recommended laptop** | PANASONIC FZ62 | |
| **Temperature range** | -20 C° / 50 C° | - 4° F/ 122° F |
| **Scan step resolution** | 4 cm | 1.5 " |

## SOFTWARE SPECIFICATIONS

| 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** |
| Automatic calibration for an easy and quick start-up |



1496
1114
1313

501
1157

1000

761.5

Pictures & drawings can be different according to technical specifications - Updating programme variations without notice are possible