# MAPTEK™ I-Site™ 8810

## TECHNICAL SPECIFICATIONS

Extra long range laser scanner combined with a high resolution digital panoramic camera.

Tough > Reliable > Proven

### GENERAL

| | |
|---|---|
| Size | 455h x 246d x 378w |
| Weight | 14kg, without battery |
| Battery | Interchangeable, LiO 2.5 hours operation |
| Levelling | 20" (internal compensator) |
| Constant operating temp. | 0° to +50°C (Short exposure* -40° to +50°C) |
| Storage temperature | -40° to +70°C |
| Compass¶ | ±1° |
| Reliability | ISO 9022 |
| Protection class | IP-65 (IEC 60529) |
| Data recorder | Wireless ruggedised PC plus onboard USB |
| Mounting | Standard tribrach mount |
| GPS mount | External 5/8" UNC thread |
| Carry case | Customised case |

### SCANNER

| | |
|---|---|
| Maximum range† | >2000m Up to 1400m, reflectivity >80% Up to 1000m, reflectivity >40% Up to 500m, reflectivity >10% |
| Minimum range | 2.5m |
| Range accuracy‡ | 8mm |
| Repeatability | ±8mm |
| Exit aperture | <8mm |
| Beam divergence | 0.25mrad (1/e^2 radius) |
| Acquisition rate | 8800 points per second |
| Product laser class | Class 1 IEC60825-1:2007 |
| Wavelength | Near IR |
| Intensity measurement | Yes |
| Angular step selectable | 0.2° to 0.0125° |
| Angular accuracy§ | 0.01° |
| Angular measurement res. | 0.001° |
| Angular scanning range | 80° vertical, 360° horizontal |

## DIGITAL CAMERA (Included in system)

| | |
|---|---|
| Type | Line scanning digital panoramic camera |
| Pixel resolution | 70 megapixel |
| Angular range | 80° vertical, 360° horizontal |
| Acquired | During laser scan |
| Exposure control | User definable |
| Lens | Nikon 20mm f/2.8D, with filter |
| Image render method | Corrected image automatically rendered to scan in I-Site Studio |
| Depth of field | 3m to infinity |

## TELESCOPE (Included in system)

| | |
|---|---|
| Angular range | 80° vertical, 360° horizontal |
| Focal range | 5m to infinity |
| Focus control | Electronic motorised focus |
| Objective aperture | 28mm |
| Magnification | 14x |
| Reticule | Crosshair |
| Field of view | 3° in field |
| Resolving power | ±5" |
| Minimum azimuth step | 3.6" |
| Laser pointer | 650nm red laser (Class 1) |

* Time to perform 20 minute scan. Contact Maptek for further assistance

¶ Assumes no metallic objects or magnetic field inteference

† Under normal operating conditions. Based on flat normal returns and good atmospheric conditions

‡ Under Maptek test conditions

§ Pointing accuracy