

Now at
167 kHz

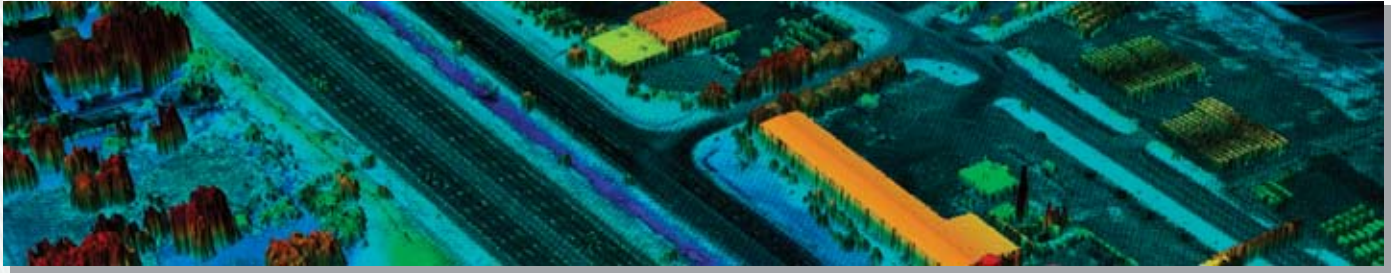


Multipulse - Maximizing Efficiency



IT'S ALL ABOUT THE SCIENCE

Optech 



Airborne Module

| | |
|--|---|
| Laser repetition rate | 33 - 167 kHz |
| Operating altitude | 80 to 4,000 m (higher altitude optional) |
| Horizontal accuracy | 1/11,000 x altitude; ± 1 -sigma* |
| Elevation accuracy | 5 - 10 cm typical; ± 1 -sigma |
| Range capture | Up to 4 range measurements for each pulse, including last |
| Intensity capture | 4 intensity readings with 12-bit dynamic range for each measurement |
| Scan frequency | Variable to 100 Hz |
| Scan angle | Variable from 0 to $\pm 25^\circ$, in increments of $\pm 1^\circ$ |
| Spot distribution | Sawtooth, uniform spot spacing across 96% of scan |
| Scanner product | Scan angle x scan frequency $\leq 1,000$ |
| Roll compensation | 5 Hz update rate (Scan angle + roll comp. angle = 30° , e.g., $\pm 20^\circ$ scan allows $\pm 10^\circ$ compensation) |
| Swath width | Variable from 0 to 0.93 x altitude (m) |
| Beam divergence nominal (1/e full angle) | Dual divergence 0.15/0.25 mrad or 0.80 mrad |
| Data storage | Ruggedized removable media |
| Position orientation system | Applanix - POS/AV including internal 12-channel dual-frequency 10 Hz GPS receiver |
| Laser classification | Class IV (FDA 21 CFR) |

| | |
|---------------------------------|---|
| Power requirements | 28 VDC, 35 A (maximum) |
| Operating temperature (ambient) | Control rack: $+10^\circ\text{C}$ to $+35^\circ\text{C}$ Sensor head: -10°C to $+35^\circ\text{C}$ |
| Storage temperature | -10°C to $+50^\circ\text{C}$ |
| Humidity | 0 to 95% non-condensing |

Control Rack

| | |
|-------------------------|-----------------------|
| Vibration-isolated case | |
| Dimensions | 65 cm x 59 cm x 49 cm |
| Weight | 53.2 kg |
| Cables/laptop | 7.6 kg/3 kg |

Sensor Head

| | |
|---|--------------------------------------|
| Fits standard camera mounts or mounts directly to floor | |
| Dimensions | 26 cm x 19 cm x 57 cm |
| Weight | 23.4 kg |
| Minimum opening | 19.2 cm x 25.5 cm (flight direction) |

Processing Software

| | |
|----------------------|--|
| DASHMap Survey Suite | Differential kinematic GPS solution Trajectory optimization from multiple base stations. XYZ point calculations module. Windows XP compatible |
|----------------------|--|

GPS Ground Support

| | |
|------------------------|---|
| Multiple base stations | Any dual frequency receiver with Rinex output |
|------------------------|---|

* As per Optech test procedures



041206. Supersedes all previous and undated versions.

CANADA:

Optech Incorporated

300 Interchange Way
 Vaughan, Ontario, L4K 5Z8 • Tel: [905] 660-0808
 Fax: [905] 660-0829 • Web: www.optech.ca
 Email: science@optech.ca

© Copyright 2006, Optech Incorporated. All rights reserved.

USA:

Optech International, Inc.

7225 Stennis Airport Drive • Suite 400
 Kiln, Mississippi 39556 USA • Tel: [228] 252-1004
 Fax: [228] 252-1007 • Web: www.optechint.com
 Email: inquiries@optechint.com