

TOM500 Bird Dissuasion Laser System

Specifications – v3.8

Optical

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| Laser Class | 2M (IEC 60825-1 Edition 1.2, August, 2001) |
| Laser wave length | 532 nm |
| Output Power | set to max 0.70 mW over a 10mm diameter gauge |
| Emission duration | continuous |
| Laser life time | 15000 hrs (in air controlled environment) |
| Annular beam dimensions | 150 mm and 56 mm outer and inner diameters, respectively |
| Collimated beam divergence | ≤ 17 μrad, expanded |

Electrical

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| Operating voltage | Single phase 198-254 Vac 50/60 Hz |
| Power supply | 1.0 kW continuous, 2.2 kW at A/C startup |
| Battery (inside the UPS unit) | 3 x 12V-7Ah sealed lead-acid, maintenance-free |

Remote Control

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| Data transmission cable | Cat5 or Cat5e shielded Ethernet cable |
| Outdoor antenna (wireless) | 5.x GHz, max 21 dBm directional antenna (optional) |

Environmental

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| Duty cycle | 24/7, continuous operation (recommended) |
| System location | Min 150 m to the runway center line |
| Operating temperature | -20 °C to +50 °C* |
| Operating altitude | max 2000 m (6500 ft) above sea level |
| Light conditions | set to max 15000 lux (broken 5/8 cloud cover at daytime) |
| Protection index | IP55 (dust and water jets) protected enclosure (IEC 60529) |
| Air conditioner refrigerant | R134A |
| Storage temperature | +10 °C to 30 °C, in (dry) air-controlled environment. |
| Relative humidity | 0% to 95%, non condensed |

* with a refrigerating power of 1300W and a calorific power of 700W

Mechanical

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| Weight | 450 kg |
| Height, width, length | 2150 mm x 1215 mm x 800 mm |
| Azimuth axis range | ±100 deg (across end limit switches) |
| Scanning range | ±1500 m, in standard reference operating conditions** |
| Scanning speed | 2 m/s to 10 m/s, relative to the runway center line |
| Elevation axis range | ±2.5 deg |
| Elev. axis dynamic stability | ±0.005 deg (±13 cm @ 1500 m) @ 5 m/s scanning speed |
| Stability with time | Trajectory to be checked every 6 th month |

** standard reference operating conditions:

- constant zero slope runway;
- flat surrounding airfield;
- 10000 lux light conditions over the entire field of operation;
- 15 °C outside air temperature;
- airfield at sea level altitude

Conformity

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| Safety standards | IEC 60950-1, Sep. 2006 |
| EMC generic standards | IEC 61000-6-4, 2007 and IEC 61000-6-2, 2005 |
| CE marking requirements | CE marked |

BATTERIES – IMPORTANT NOTICE: The product contains lead-acid batteries that must be processed according to applicable local regulations concerning batteries. The battery may be removed to comply with regulations and in view of correct disposal.