

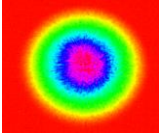
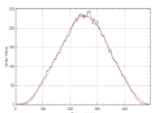
Directed High-Energy Beam System



Applications:

- Targeted Surveillance
- Jamming of Photosensors
- Neutralise CCD Based Surveillance Systems

System Specifications

	Specifications
High-Power Laser System	<ul style="list-style-type: none"> • peak/average power >750W • wavelength: 915nm +/-5nm
Mode of Operation	<ul style="list-style-type: none"> • CW mode • pulsed mode; pulse repetition rate up to 600KHz • adjustable pulse length • shortest pulse length – 1us • pulse rise time ~ 250ns, pulse fall time ~ 150ns • adjustable duty cycle • adjustable peak power
Beam Characteristics	<ul style="list-style-type: none"> • collimated beam • exit beam diameter ~ 98mm • beam divergence ~ 0.5mrad • beam profile - 86% of energy within the 1/e² circle <div style="display: flex; justify-content: space-around; align-items: center;">   </div>

	Specifications
System Control	<ul style="list-style-type: none"> • internal control for parameters setting from the front panel (micro-controller based system) • external control for parameters setting from a computer • internal pulse generator option • external pulse generator option • two steps 'Laser Fire' operation: Arm + Fire • the front panel displays: the laser set power, the pulse repetition rate, the pulse length and the laser temperature
System Cooling	<ul style="list-style-type: none"> • air-cooled system • temperature monitored via 4 analogue independent temperature sensors and one digital temperature sensor
System Packaging	<ul style="list-style-type: none"> • x 2 stackable enclosures (W x H x D) as per below • the laser module enclosure: 562mm x 345mm x 540mm; weight – 67Kg • the electronics-power supplies enclosure: 562mm x 300mm x 540mm; weight – 36Kg • collimator, length 340mm, maximum diameter 130mm; weight 5Kg • x 4 castor wheels with brakes • the 3 units are detachable • connectivity via x 6 cables terminated with Mil Spec connectors, as per Image 1 - System Connectivity

Utilities and Requirements

Operating Voltage	<ul style="list-style-type: none"> • 110V – 240V, AC
Electrical Interface	<ul style="list-style-type: none"> • X 2 mains power cables connected to independent lines • each power cable will draw < 12A from the mains outlet
Maximum Power Consumption	<ul style="list-style-type: none"> • < 4.5KW (environmental temperature dependent)
Operating Temperature	<ul style="list-style-type: none"> • 10C to 40C
Storage Temperature	<ul style="list-style-type: none"> • 5C to + 70C
Laser Safety Class	<ul style="list-style-type: none"> • 4
Safety	<ul style="list-style-type: none"> • system power up from a lockable toggle switch • two steps 'Laser Fire' operation • laser class 4 warning labels • Emergency Stop button



Image 1 – System Connectivity



Image 2 – System in Operation