

NAM-SW-E227-X 'Sand Lane, M' Semi-Autonomous Disposable Lasing Node, Miniature



¹⁾ Part of the [NAM 'Guisarme'](#)

[Autonomous Weapons Project](#), initiated to inflate the combat potency of [SMoDloN](#) Forces against the [NMX](#) offensive, free up standing garrisons for critical deployment, and allow a disproportional extension of military force for a counteroffensive or reclamation effort. Similar to the [NAM-SW-E230-X](#), the 'Sand Land, M' Micro-Laser Mine is a cheap one-shot weapons platform that can be deployed in formations to defend concentrated areas of space such as stations, bivouacked fleets, or planetary orbits. In addition to being used in a passive defense, the Sand Lane, M can be deployed rapidly and in extremely large volleys to dissuade capture or pursuit; it can also be deployed as an active decoy, forcing an enemy to quickly delegate targets, as well as defending against incoming ordnance that would normally overwhelm a ship's typical defenses. With their limited number of shots and being produced by proprietary facilities owned by the [DloN](#) the SW-E227-X promises to provide a cheap and controlled source of civilian defensive armament. The main advantage of the E227-X in addition to its smaller size which means more munitions per square inch of hull space, the miniature lasing node also deploys from its racks and arms much faster as its bigger brother. The E227-X can also be deployed from interdiction buoy launchers, giving vessels equipped with the launchers a more lethal option.

Purpose: Augmented Defensive Firepower **Secondary Purpose:** Anti-Ship Mine **Damage Rating:** [Tier 9, Heavy Anti-Mecha](#) Coherent Bomb-pumped Laser Effective Range 0.2ls Maximum Range: 1ls Rate of Fire: Single-shot; arming procedure takes roughly two seconds to run an active scan, orient firing lens, and detonate nuclear trigger; deploying from stealth coating takes one second

Payload Variable-size Modular External Deployment Rack; typical configurations hold 6, 12, and 18 nodes; can also be launched from interdiction buoy launchers and be carried internally **Payload Deployment Rate:** 1 second per node²⁾; 0.5 seconds between nodes sharing the same rack **Cost:** 1,00 DA for each Deployment Rack Module; 750 DA for each Lasing Node; 100 DA per hour³⁾ for installation and loading services **Specific Configuration Discounts:** 15% discount provided with background check and purchase of a 6, 12, or 18-node launcher and installation services

Fire Control: multiple onboard subsapce scanners, remotely activated; may be set to passive autonomous proximity trigger; may be fed targeting data but has no FoF systems **Attitude Control:** pressurized gas thrusters good for 60 seconds of control

Installation

The SW-E227-X A4 Deployment Rack is attached to a ship's hull by carbon-impregnated nanowelding gel. Nanomachines and micromachines in the gel cannibalise the welding medium for fuel and construction material, a firm fullerene weld structure takes roughly two hours to construct properly, placing multiple Deployment Rack Modules together requires an hour to synchronise the welding machines in two sets of modules, but they can be installed all at once by a single technician, as opposed to each separate node requiring an individual technician and a two hour service for which he must be paid. Service costs maintain a linear increase even though actual time can be reduced at a geometric rate in proportion to the number of modules being installed because the workload remains linear. Loading a lasing node requires only 20 minutes of work. The nanoassemblers remain dormant within the weld's superstructure and are effectively disposable, but any damage suffered to the weld can be repaired by a site-specific injection of carbon-impregnated fuel gel, allowing the machines to be reused dozens of times if necessary. Pure fuel medium can also be injected into the weld so that the assemblers will deconstruct it, allowing the Deployment Rack to be removed or replaced.

Operation

The SW-E227-X Semi-Autonomous Disposable Lasing Node, Miniature uses an omni-directional subspace transmitter/receiver to communicate with its launching vessel as well as detect targets. The launch process disables a cluster of safety umbilicals that diffuse the weapon if broken while the dummy signal is being transmitted along them. The deployment rack is composed of an umbilical cavity, basal platform, and payload security arms. Precise placement of lasing nodes requires a separate manipulator or gravitic tractor system, the SW-E227-X system only provides for transport and basic separation of the lasing node.

Activation mode can be selected during the launch process and has two variations. Proximity detection mode passively tracks ship emissions until a suitable target enters the weapon's engagement envelope which is typically its effective range though the firing computer can be dailed out to two lightseconds, the maximum range at which the radiation beam retains offensive concentration. Targeted activation uses the deploying ship's command, communications, and control centers to designate an appropriate target; detonation of the nuclear trigger can be done remotely, slaved to a timer, or both, ensuring the weapon will fire even if targeting communications is jammed. Once a target has been designated and the weapon

receives a fire command, either remote signal or timed activation, it orients itself on the designated signature and fires without further guidance.

The actual firing mechanism is a fission-ignited fusion bomb, the radiation from the explosion is focused within the lasing shell and released through a diamond lense as a coherent laser beam within the low ultraviolet range of the electromagnetic spectrum. The beam pulse strikes the target within a duration of barely a microsecond, causing thermal shock to the target capable of shattering armor plate and flash-heating compartments with deleterious effects to any crew that might be occupying the unfortunate section.

Construction

Graphene Lasing Shell: SSP1 Optional Ferro-Silicate Stealth Coating: ASP1 This coating is used to disguise the weapon as a typical asteroid, any scan of the node that does not reveal its structure outright will see nothing more than a uranium-enriched rock, though analysis of the concentration of radioactive materials would reveal it to be anomalous. This coating must be discarded in order to fire, slightly increasing the arming procedure and increasing visibility during that period.

1)

Size Comparison between the E227-X on the left and the E230-X on the right

2)

multiple nodes can deploy simultaneously

3)

or part of an hour

From:
<https://wiki.stararmy.com/> - **STAR ARMY**

Permanent link:
https://wiki.stararmy.com/doku.php?id=corp:nam:guisarme_project:nam-sw-e227-x_sand_lane_m_semi-autonomous_disposable_lasing_node_miniature

Last update: **2023/12/21 04:21**

