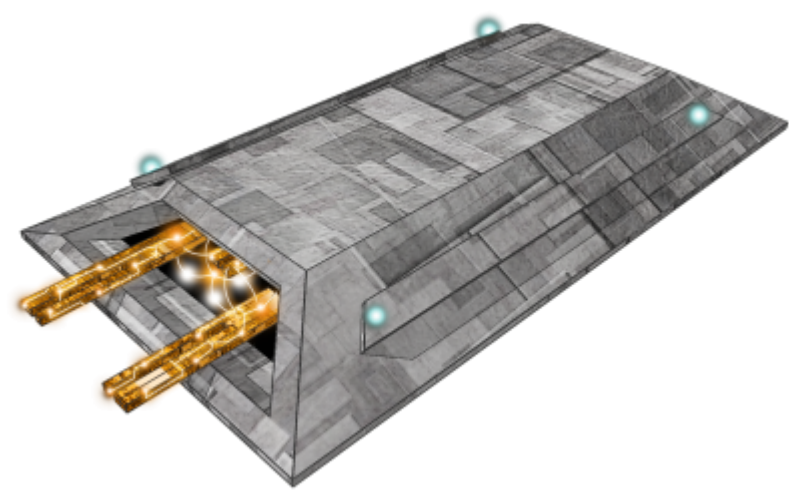


Ke-V9-E3301 Unified Tactical Sensor Array / FTL Ansible

The Ke-V9-E3301 Unified Tactical Sensor Array / FTL Ansible was developed for use on the [Ke-V9 "Nodachi" Assault Fighter](#) and became available in [YE 33](#).



Specifications

Class: Ke-V9-E3301 Type: Sensor / Communication Array Designers: [Ketsurui Fleet Yards](#). [Murasaki Emiko](#)
Manufacturer: [Ketsurui Fleet Yards](#) Production: Mass Production

Dimensions

Length: 1.78 meters Width: 90 centimeters Height: 15 centimeters

Sensors

Variable Wide-band Imaging Clusters

Variable Wide-band Imaging Clusters	
Type	Unidirectional
Detection Classification	Passive
Effective Range	2 AU

Specialized telescopic imaging scanners that read the visible spectrum with added infrared, and ultra-

violet monitoring capabilities. They produce a gyroscopically-stabilized view and are capable of powerful magnification up to eight-hundred and fifty times.

Imaging sensors are important because they allow the operator to visually identify an object of interest, essentially acting as the eyes of the ship. Can be used in conjunction with other sensor systems in the creation of dynamic multi-layered readouts. Images are presented either on a fixed or volumetrically projected screen.

Electromagnetic and Gravimetric Sensors

Electromagnetic and Gravimetric Sensors	
Type	Unidirectional
Detection Classification	Active
Effective Range	Optimal 2 LY, effectiveness drops off at 3.2 LY

Gravimetric Scanners

These powerful sensors sense the presence of ships and other objects through the warping effect their mass has on space-time. While this sensor is not particularly good at getting exact information about the phenomenon being observed, it is extremely good at working out where something is, and its inertia.

Data from these sensors are generally translated for visual use in graphs and can be combined with readouts from other sensor systems.

Gravimetric scanners are proficient in detecting vessels utilizing gravimetric shielding, gravimetric and other non-distortion sub-light drives, [Anti-FTL Fields and their countermeasures](#), graviton beams and emissions. It also helps provide details about the inertia of normal spacial phenomenon.

Electromagnetic Sensors

Electromagnetic sensors observe the electromagnetic spectrum, they are utilized like radar where the sensor emits a carefully configured electromagnetic wave which then returns and is analyzed for variances.

Data from these sensors are generally translated for visual use in graphs and can be combined with readouts from other sensor systems.

Electromagnetic sensors are proficient in detecting electromagnetic shielding, electromagnetic pulses or waves emitted from other ships, weapons, or spacial phenomenon.

Magnetic Resonance Sensors

Utilize a spectrum electromagnetic pulses of varying frequencies to determine the constituents of a metallic object. This can be very useful when trying to pinpoint the weakness in a structure of a ship,

building or other object of interest.

Infrared Spectrometer

Infrared Spectrometer	
Type	Unidirectional
Detection Classification	Active
Effective Range	Optimal up to 2 LY, effectiveness drops off at 2.5 LY

This sensor basically detects the infrared radiation given off by hot bodies. In space almost everything is cold, space itself is only around 3 Kelvin, and the only things which are significantly above this are stars, planets and other celestial bodies. As such, if something is giving off Infrared radiation and it's not a celestial body then it must be something artificial.

Infrared Spectrometers can be used to identify ships and weapons emitting infrared radiation.

This data can be used as an overlay with navigational charts or images, or visualized in a graph.

Alternate scanning mode

Can be used to examine matter clouds, nebulae, atmospheres and organic compositions by the array emitting an infrared beam, and analyzing the absorbency of the substance being examined to identify the molecular bonds that hold the molecules together.

Distortion/Subspace Sensors

Distortion/Subspace Sensors	
Type	Omnidirectional
Detection Classification	Active
Effective Range	Optimum to 0.5 LY, effectiveness diminishes on a gradient out to 20 LY.

Utilizes low-energy pulses to detect variances in subspace, for detecting ships and objects moving through subspace. However due to the limited effective range it is mainly utilized to detect ships entering or emerging from hyperspace, or the utilization of distortion drives such as [CDD](#) or [CFS](#), distortion shielding and subspace-encased weaponry such as those utilized by the [Sfrarabla Mishhuvurthyar Xhrafuklurp \(SMX\)](#) and other factions. These sensors can also be utilized to observe natural subspace phenomenon.

Data is generally translated into graphs or other visual aids for easy interpretation.

Subspace Mass Sensors

A secondary scanning mode in which the array is utilized to simply detect mass in subspace, and its passage through this domain. This sensor also functions on the related hyperspace. It is vital for

detecting vessels which are traveling through these domains. It is notably hard to hide mass from these variety of sensors when traveling through Hyperspace or Subspace.

Time-Modulated Ultra-Wide Band Radar

Time-Modulated Ultra-Wide Band Radar	
Type	Omnidirectional
Detection Classification	Active, but covert.
Effective Range	Atmospheric: 2,000 km

Signals transmitted by UWB radars are pulses generated pseudo-randomly in time. They are only 0.5 nanoseconds in duration. The energy content in any conventional frequency band is below the noise, making TM-UWB transmission highly covert. TM-UWB has no carrier frequency or conversion, and because of the low frequency content of TM-UWB signals, they are capable of seeing through foliage and nonmetallic objects better than regular radar can. Ideal for atmospheric operations and nebulae.

Communications

Laser

Laser	
Speed of Communications	Speed-of-Light
Distance	Theoretically unlimited
Vulnerability	Secured

A directed beam of transmitted light or energy can be aimed at a target receiver, the beam can then carry a signal which can only be received by the receiver on the path of the beam. Can theoretically transmit an unlimited distance but unfortunately, as with radio communications, the signal's speed is limited by the speed of light and the receiving party has to be in the right place at the right time.

Radio

Radio	
Speed of Communications	Speed-of-Light
Distance	Limited due to speed
Vulnerability	Highly vulnerable. Encrypted.

Radio is the wireless transmission of signals, by modulation of electromagnetic waves with frequencies below those of visible light.

Electromagnetic radiation travels by means of oscillating electromagnetic fields that pass through the air and the vacuum of space. It does not require a medium of transport. Information is carried by systematically changing (modulating) some property of the radiated waves, such as their amplitude or their frequency. When radio waves pass an electrical conductor, the oscillating fields induce an

alternating current in the conductor. This can be detected and transformed into sound or other signals that carry information.

Full spectrum, Dual-Modulation, range theoretically unlimited except by interference. Practical range is short, since the waves only travel at light-speed.

Hyperspace

Hyperspace	
Speed of Communications	Faster-than-light
Distance	Unlimited, have to know where receiver is
Vulnerability	Moderately vulnerable. Encrypted.

Transmission of laser and radio communications through a hyperspace conduit, hyperspace being a dimension where the distances between points is shorter. The technology itself is based on the same premise as [Hyperspace Travel](#). The sender has to know the location of the receiver. In general unless the distance between the transmitter and the receiver is more than a few hundred light years messages are in real-time. Transmissions can be blocked by [Anti-FTL Fields](#).

Products & Items Database	
Product Name	Unified Tactical Sensor Array
Nomenclature	Ke-V9-E3301
Manufacturer	Ketsurui Fleet Yards
Year Released	YE 33

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