

Tracking and position system at 24GHz

Futures.

- Operation frequency 24GHz
- High accuracy
- Operation in hard dusty conditions
- Stable operation in multi reflection conditions
- Compact and reliable construction
- Meet ETSI EN 300 440-1 standard



Applications.

- Distance Measurement
- Collision-Avoidance
- Pointing system

Specifications.

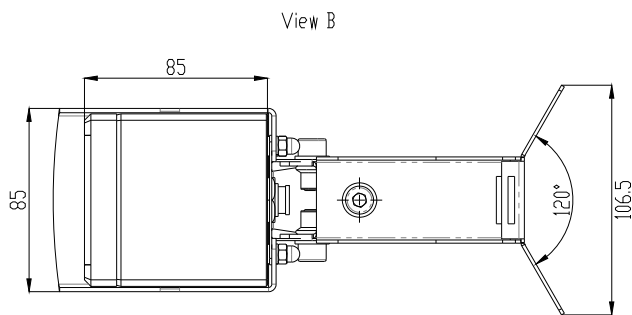
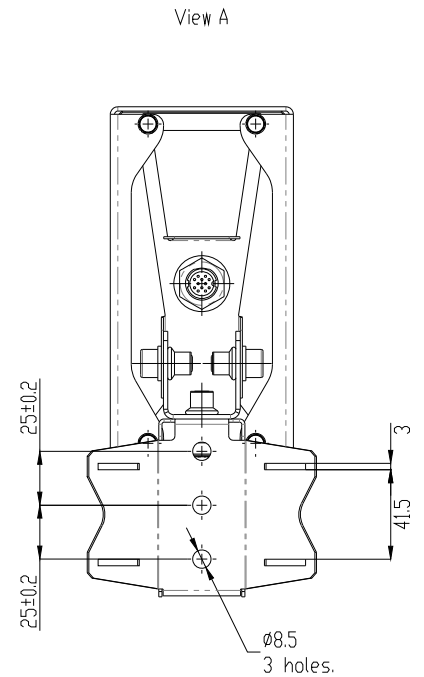
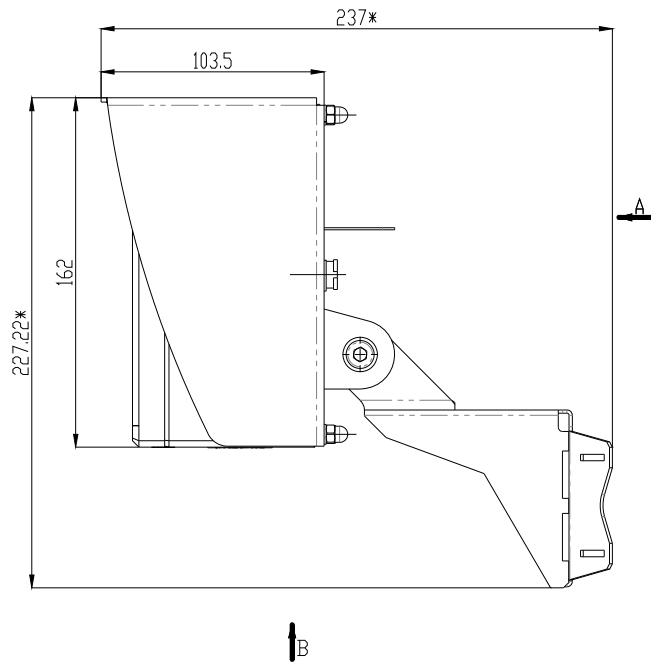
Model No	TPSA-24V1
Operation frequency	24.0-24.25 GHz
Output power, max*	0.1W EIRP
Operation distance	Up to 600m
Distance accuracy**	Up to +/-10 cm
Antenna type	Integrated planar
Antenna beam	7x20 deg
Data rate	Up to 30ms
Hardware Interface	Ethernet (UDP), optionally WI-FI
Data Interface***	Elva-1 TPSA-24 protocol
Voltage	9-18V DC
Power consumption	11W
Operation Temperature	-45 - +65C
Protection class	IP65
Connector (Ethernet version)	Harting, (RG-45 + 2 pins power line)
Dimensions	See drawing
Weight	1.5kg

* According to ETSI EN 300 440-1

** Depend on using conditions

** See details below

Outline drawing



Communication protocol.

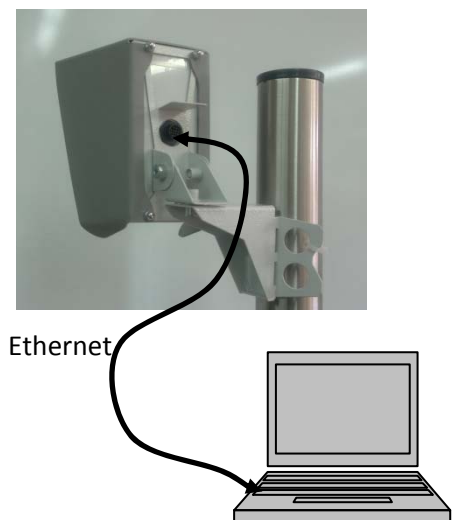
Ethernet, base protocol: UDP.

Device defaults

Source IP	192.168.10.10
Destination IP	192.168.10.255
Source port	whois++ (63)
Destination port	whois++ (63)
NetMask	255.255.255.0
Source MAC	00:1e:68:ae:76:ff
Destination MAC	ff:ff:ff:ff:ff:ff

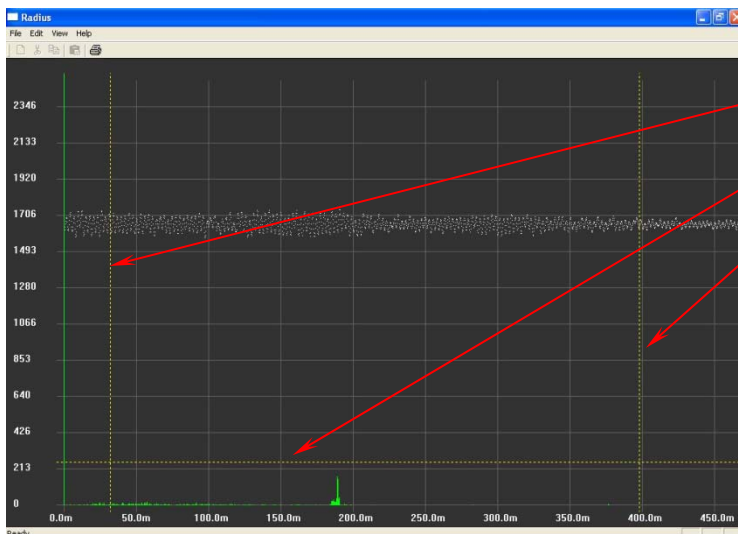
UDP datagram len 1026 bytes

<2 bytes> sweep number and packet number
 <1024 bytes> data 512 x 16bit

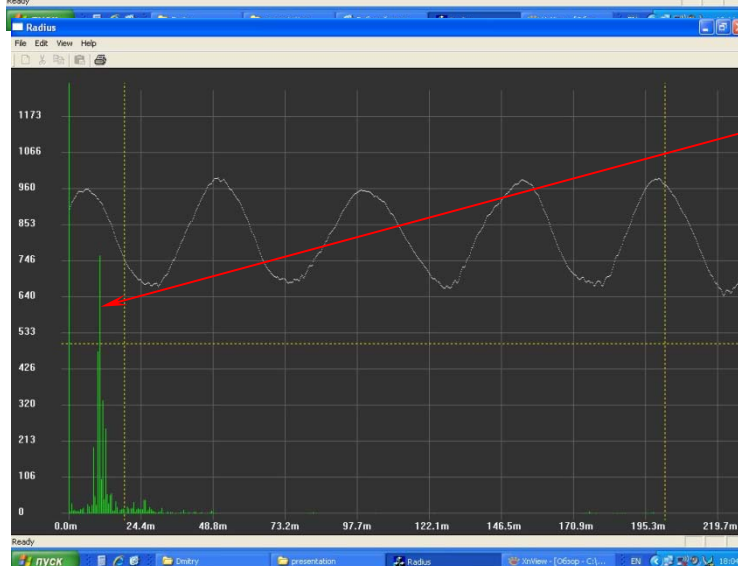


Software.

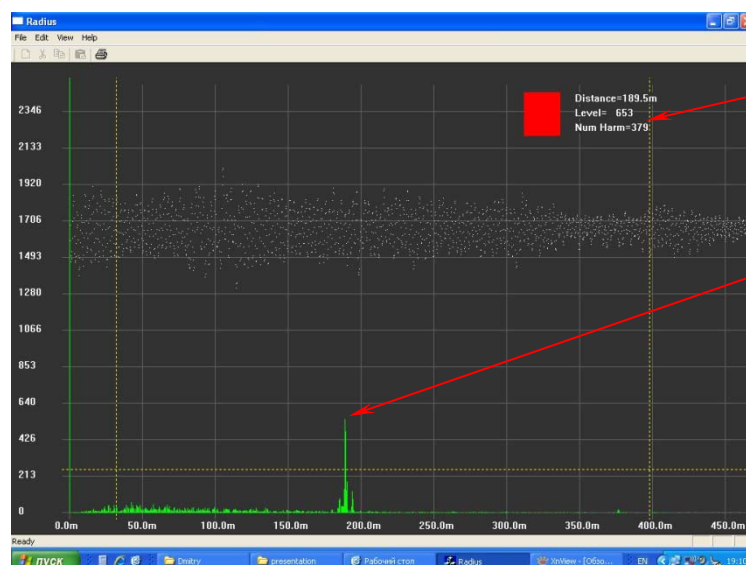
- Window analyze: min/max distances and level of reflected signal can be set
- As an object is into window analyze, message and sound alarm appear.



Distance and signal level limits of envelope are set by user



This object is outside of the user-programmed detection envelope (detected, but no response from system)



Alert Message also shows Distance

Detected Object