Stilsoft
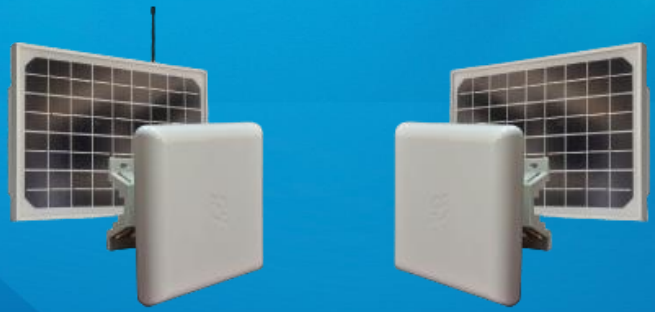Russian developer and manufacturer
of complex security systems

STS-105

Security sensor

STVF.426479.093

PURPOSE

STS-105 is an autonomous dual-position radio channel ray security sensor designed to detect intrusion into a secured facility and trigger an alarm message.

FIELDS OF APPLICATION

- perimeter and extended lines security systems
- integrated facility security systems

VERSION

- sensor consists of a receiver and a transmitter in hermetic plastic casings, both equipped with a mounting bracket
- sensor includes STS-930 unit (for receiver) and STS-932 unit (for transmitter)
- STS-930 unit is in a metal casing, equipped with batteries, a solar module and a radio modem
- STS-932 unit is in a metal casing, equipped with batteries and a solar module

FEATURES

- forming an ellipsoidal detection zone from 5 to 200 meters long
- detecting an object crossing a secured line in "standing" and "crouching" positions
- generating and transmitting alarm notification via radio channel to BRDM unit (purchased separately)
- connecting up to 63 of STS-105 security sensors to the Ethernet data bus when using together with BRDM module
- sensor adjustment by using STS-4922 configuration cable (purchased separately)

PECULIARITIES

- STS-930, STS-932 units providing power supply and radio communication to the sensor
- analogue signal digital processing, reducing the probability of false detector triggering
- means for controlling the sensor's status and diagnosing the detector operability

SCOPE OF SUPPLY

| Name	Quantity
✓ STS-102 Security sensor, including:	1 pc.
− Receiver STVF.464332.009	1 pc.
− Transmitter STVF.464214.008	1 pc.
− STS-930 unit	1 pc.
− STS-932 unit	1 pc.
✓ Packaging	1 pc.
✓ Passport	1 copy
✓ Operating guidelines*	−
* The operating guidelines are supplied in a single copy when shipped with a batch of products or as part of a system. For single deliveries, the operating guidelines are supplied for each unit Operating guidelines are available at: http://stilsoft.ru	

RELIABILITY AND WARRANTY

- Warranty operation period - 2 years
- Average operation period before decommissioning - 10 years

TECHNICAL PARAMETERS

Name	Quantity
Length of detection area, m	from 5 to 200
Intruder detection probability	0,98
Intruder speed detection range, m/s	от 0,1 до 10
False alarm operating time, h (minimum)	1000
Alarm message: − transmission frequency, MHz − radiating power, mW (maximum)	433,5 10
Line-of-sight alarm transmission range, m (maximum)	1000
DC power supply voltage, V	12±10%
Current consumption, max. mA (maximum): − Transmitter − Receiver (standby/transmit mode)	8 22/50
Battery capacity, Ah	7
Operating mode	Continuous
Operating temperature range, °C	from -40 to +50
Overall dimensions, mm (maximum) − transmitter and receiver − STS-930 and STS-932 units with bracket and antenna	210x210x100 351x336x333
Weight, kg (maximum)	15

DETECTION ZONE CONFIGURATION
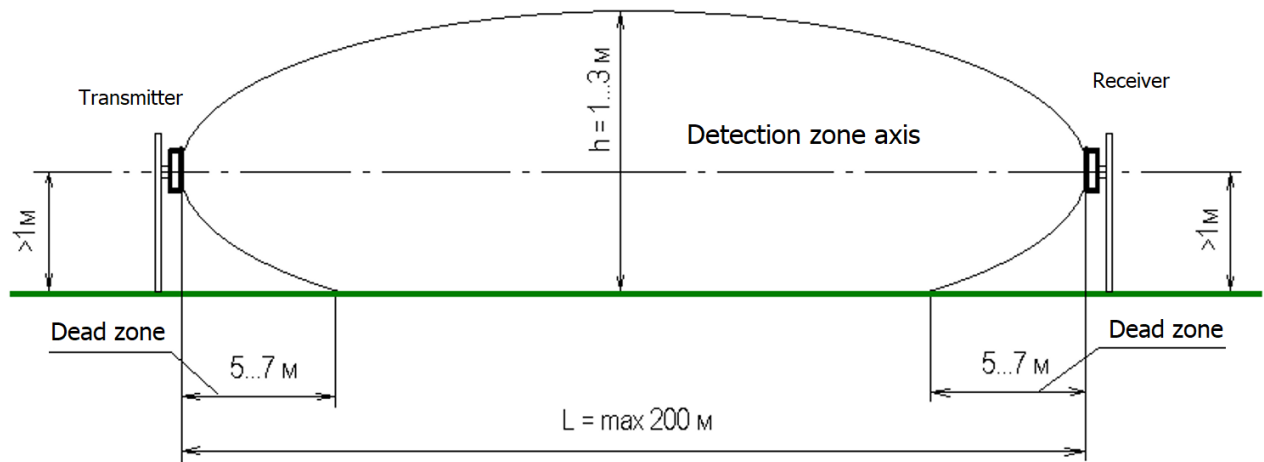
CONNECTION

Connection of receiver and transmitter

Wire designation for receiver connection

Wire color	Designation
White-blue	Power supply "-"
Orange	Power supply "+"
Green	Alarm relay output
White-green	Alarm relay output
White-brown	Select processing algorithm
Brown	Select synchronization algorithm
Blue and white-orange are not used	

Wire designation for transmitter connection

| Wire color	Designation
Orange (brown)	Power supply "+"
White-orange (white-brown)	Power supply "-"

The other contacts are not active.

STS-930 unit connection
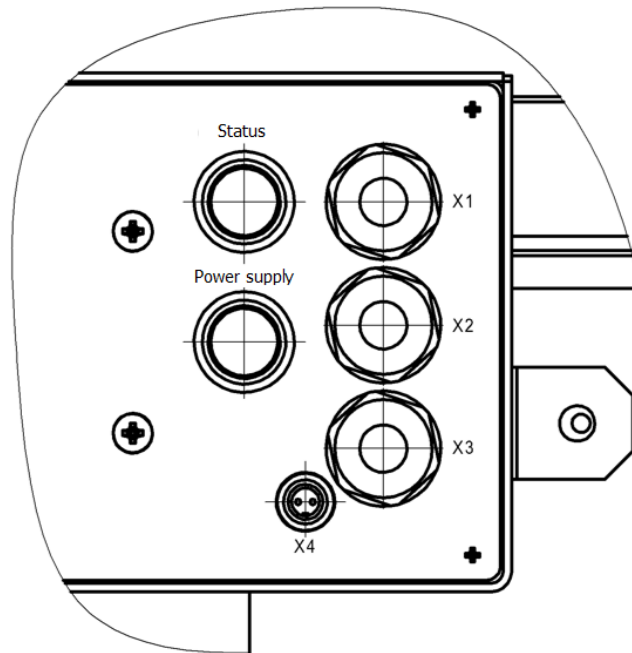
X1 - sealed feed-through for connecting receiver to STS-930 unit

X2 - sealed feed-through for connecting solar module

X3 - sealed feed-through for antenna connection

X4 - socket for connecting configuration cable

X5 - sealed feed-through for connecting the battery

STS-932 unit connection
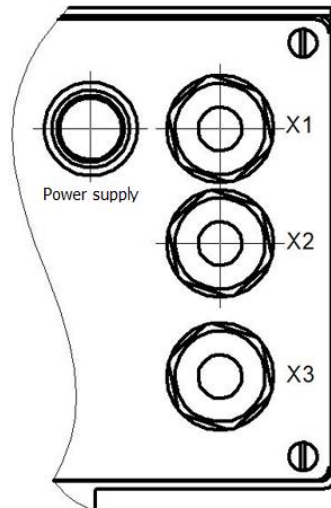
X1 – sealed feed-through for connecting transmitter

X2 – sealed feed-through for connecting solar module

X3 – socket for connecting configuration cable