Stilsoft
Russian developer and manufacturer of complex security systems

STS-112

Security sensor with sensitive elements set

STVF.426479.094

PURPOSE

STS-112 security sensor with sensing element set is designed for detecting intruder trying to damage or traverse a mesh metal or concrete fence and causing mechanical impact on it.

FIELDS OF APPLICATION

- as a stand-alone intrusion protection system
- as part of integrated facility security systems in combination with detection equipment of other operating principles

VERSION

- sensor is a processing unit with connected cable sensing elements and STS-930 unit
- sensor processing unit is enclosed in a metal casing for protection against atmospheric impact and mechanical damage
- each of cable sensing elements is a special cable with a resistor contained end coupling
- STS-930 unit is in a metal casing, equipped with a solar module, battery, a radio modem and a controller

FEATURES

- detection of ultra-small mechanical fence vibrations caused by the intruder's physical impact
- protection against tunnelling when laying the cable sensing element into the ground

- generating and sending an alarm notification upon fence crossing or breaking attempts
- alarm notification transmission to the data acquisition and processing system via radio channel
- automatic regular operability check of the processing unit and sensitive elements
- generating a fault notification upon breakage or short-circuit detection
- adjusting the sensor with STS-4922 configuration cable STVF.426471.187 (purchased separately) or via RS-485 interface via RS-485-USB adaptor

PECULIARITIES

- power supply and radio communication of the sensor processing unit provided by STS-930 unit
- sensor is equipped with high-frequency and low-frequency sensing elements for vibration detection and for indication of partial fence damage
- adaptive algorithm of signal processing, significantly reducing the number of false alarms, including those resulting from changes in environmental conditions
- method of sensing elements installation is selected depending on the fence type and the line crossing approach that should be prevented

SCOPE OF SUPPLY

Name	Quantity
✓ STS-112 Security sensor with SE set, including:	
– security sensor processing unit	1 pc.
– STS-930 unit STVF.425664.012	1 pc.
– connection cable STVF.425628.032	1 pc.
– cable sensing element set for STS-111, STS-112 sensors	1 set
✓ Mounting set STAE.425911.002, including	1 set
– PY04-19TK Socket	1 pc.
– Heat shrinkable tube TUT 2/1	0,3 m
– Insulated ring tip NKI 2-4	2 pcs.
✓ Spare parts-O set STVF.425973.157	1 set
✓ Passport	1 copy.
✓ Packaging STVF.305639.004	1 pc.
✓ 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 - 8 years (minimum)

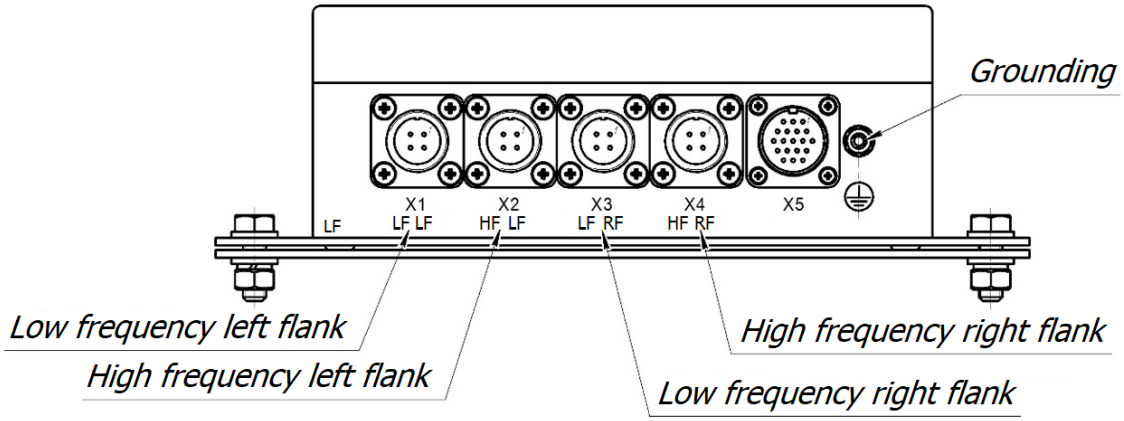
TECHNICAL PARAMETERS

Parameter name	Quantity
Length of secured section, m	2 flanks 250 m each
Detection probability	0,95
Alarm message: – transmission frequency, MHz – radiated power, mW (maximum)	 433,5 10

Parameter name	Quantity
Ensured line-of-sight alarm transmission range, m (minimum)	1000
Number of sensors in the operating area of alarm receiver (maximum)	63
Standby time after power-up, s	60
Alarm recovery time, s	10
Notification duration, s	from 1 to 60
DC power supply voltage, V	12 ± 10%
Battery capacity, Ah	7
Current consumption, mA (maximum)	45
Operating mode	continuous
information value	15
Operating temperature range, °C	from -40 to +50
Overall dimensions, mm (maximum): – security sensor processing unit – STS-930 unit with bracket and antenna	 210x118x76 351x336x333
Weight, kg (maximum): – security sensor processing unit – STS-930 unit without bracket	 2 6,4
Number of beams in SEC set, pcs.	4 250m each

CONNECTION

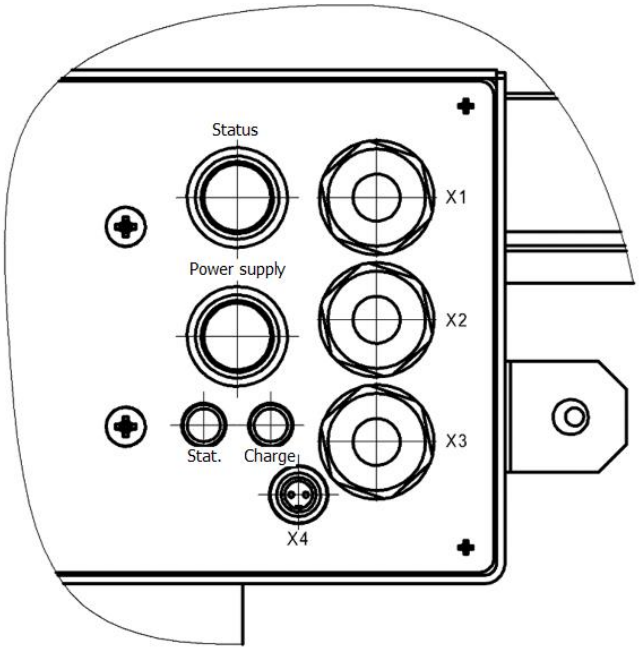
Connection of processing unit



X1–X4 – sockets for connecting sensing elements

X5 – socket for connecting configuration cable STS-4922 and wired connection

STS-930 unit connection



X1 – sealed feed-through for connecting security sensor processing unit to STS-930
X2 – sealed feed-through for connecting solar module
X3 – sealed feed-through for antenna connection
X4 – socket for connecting configuration cable

Developed and manufactured in Russia

+7 (8652) 52-44-44
www.stilsoft.ru