



SC-TW1 Taut Wire Fencing System

SC-TW1 Taut Wire Fencing System adopts the SQ-RU model sensor with high sealing of non-metallic fireproof materials to detect the force value change of each tension wire, and provides the detection and defense function of the whole security site. The design of high pre-alarm tension value of the tension wire in each protective zone and the excellent sealing and detection performance of the sensor ensure that the system has a very high probability of detection (PD); at the same time, it can maintain a very low false alarm and nuisance alarm rates (FAR / NAR).

SC-TW1's mechanical structure and material corrosion-resistant design process make it the first choice for applications in complex terrains such as plateaus and desert, marine climate environments, and other corrosive environments.

Suitable Applications

SC-TW1 is an ideal system for most perimeters with harsh environment. Widely installed in security sites such as:

- Airports
- Borders
- Energy Utilities
- Government Locations
- Military Sites
- Nuclear Facilities
- Prisons
- Private Houses
- Warehouses

A2-RU Sensor

- Model: A2-RU
- Measuring range: Detection 15 - 30kg force or more
- Working temperature: -40°C to +85°C
- Material: shell material, non-metal fireproof material
- Protection level: IP67 (outside leakage part)
- Accuracy Level: 0.1kg

Features & Benefits

- Extremely high detection rate (PD)
- Extremely low false alarm & nuisance alarm rates (FAR / NAR)
- With an automatic calibration function, it can maintain a constant detection sensitivity
- Using A2-RU model sensor, the tension wire spacing is easy to adjust
- Sensor is easy to replace
- The detection system can identify the working status (normal/failure) of each group of sensors
- Ideal for tall and long perimeter fencing



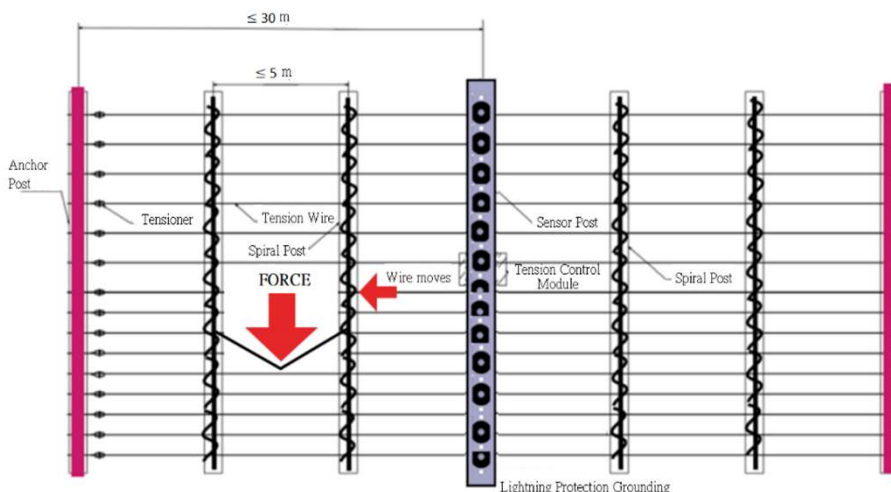
For any inquiry: vance.lau@simiquecorp.com

Working Principle:

SC-TW1 Taut Wire Fencing System is composed of multiple parallel twisted tension wires, each tension wire corresponds to a group of sensors, and the length of each detection zone is usually designed to be no more than 60 meters. Multiple sets of sensors are arranged and installed on the Sensor Post and it is located in the middle of the detection zone, used to collect the force value changes on all tension wires to perform the management and control of the entire detection zone.

Trigger alarm condition:

- The tensile pressure applied to the tension wire reaches 15kg and the duration is more than 2s;
- Single-line displacement $\geq 15\text{cm}$ and duration is more than 2 seconds
- cut the tension wire
- Signal transmission line short circuit, open circuit
- Destruct tension detection module;
- Remove the cover of the tension control module or alarm control module
- Stampede over the tension wire fence



Communication Processor

- Model: SQ-ECD32
- Power supply mode: DC12V to 24V
- Communication method: CAN bus/TCP network/dry contact
- Sensitivity: H/L8 gear adjustable
- Anti-interference degree: adjustable from level 1 to 4
- IP Level: IP66



Physical Description:

Length: No limit

Fence Height & Sensor Quantity:

- Vertical Max 4.2m, 32 wires
- Vertical Min 0.8m, 4 wires

Distance between wires: 10 - 20cm

Force trigger alarm: 15kg

Main part material: Stainless steel & hot-dip galvanized carbon steel

Tension wire Spec:

- Main wire diameter $\geq 1.60\text{mm}$
- Barbed wire $\geq 1.45\text{mm}$

Barbed wire distance: 120 – 150mm

Performance:

Reliability: MTBF Sensor – 60,000 hours

Ave repair time: MTTR – 10 min

Sensitivity: H/L 8 gears for adjusting

No-load power consumption: < 0.8 watts

Full-load power consumption: < 4 watts

Alarm trigger time: $\leq 2\text{s}$

Environment:

Temperature range: -40 to 85°C

Climate & changes: Unaffected by wind, temperature changes, rain, hail, snow, dust, UV exposure, etc.

Sensitivity: H/L 8 gears for adjusting

No-load power consumption: < 0.8 watts

Full-load power consumption: < 4 watts

Alarm trigger time: $\leq 2\text{s}$

Interface:

Multiple communication processors can be connected to the alarm panel through CAN bus communication cables using "hand in hand" method. The CAN bus communication can support 10km long cable transmission, and the alarm panel can support 128 groups of communication processors. In addition, the communication processor provides 3 dry contact outputs that can be connected to external systems.