

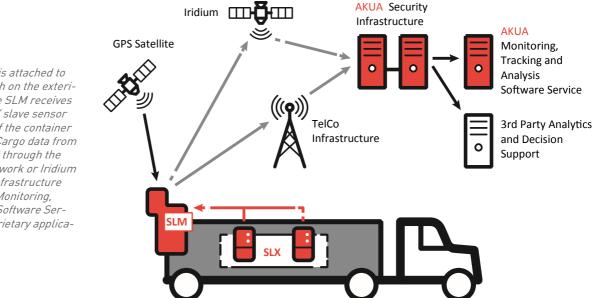
Securing the Internet-of-Your-Things

The next generation of tamper-proof cargo shipment is here in the AKUA SLM. The SLM is an innovative, cost effective, secure locking and monitoring device that uses GPS and GSM/GPRS cellular network or Iridium to monitor and safeguard shipments. It provides remote users with long-distance data on a shipment's whereabouts and condition at all times during transit as well as information on conveyance accesses and the integrity of the shipment itself.

The SLM utilizes the GPRS cellular data network or Iridium to provide regular information updates on the shipment's time-stamped GPS position and lock/breach status to the AKUA security infrastructure and then to the AKUA Monitoring, Tracking and Alerting Software Service or the user's proprietary application. Open, close and tamper events are reported immediately enabling the end user to respond to unauthorized accesses while in progress. Analysis of the position data can alert the user to route deviations and delivery delays. Paired with an environment monitoring slave device *(SLA or SLE)*, the shipment's light level, temperature and humidity data can also be tracked and alerts generated at userdefined thresholds allowing for corrective actions and creation of a record of the cargo state throughout the journey.

The SLM employs ISO17712-compliant *(secure seal specifications)* accessory aircraft-grade bolt and steel wire locking mechanisms that allow you to reuse the device any number of times. The accessory steel wire mechanism can be any length, so it can fit through a locking mechanism on the shipping container doors or around an entire shipment pallet. The accessory bolt is available in a re-usable or disposable format.

How the SLM Works to Secure Your Shipments



The AKUA SLM device is attached to the container door latch on the exterior of the container. The SLM receives data from SLA and SLX slave sensor devices. The location of the container is monitored via GPS. Cargo data from the SLM is transmitted through the GPRS cellular data network or Iridium to the AKUA security infrastructure and then to the AKUA Monitoring, Tracking and Alerting Software Service or the user's proprietary application.

Key Features

- •Easy to use
- •Re-useable wire locking mechanism
- •FCC and CE certified
- •IP67 rated
- •Serves as a master device in conjunction with an SLA, SLA-nr, SLE or alone
- •Secure communications to the shipper

- •Easy to configure, maintain, and use
- •Efficient—time saving operation
- Reliable security
- •Communicates shipment status immediately to the end user
- •Simple operational design—minimum training required
- •Flexible enough to secure any size cargo or door lock
- •Red/green LED indicators

The AKUA SLM is available in two configurations

Product	Description	
SLM	The base, rechargeable version of the device.	
SLM-x	The larger SLM with an extended battery for longer life.	

AKUA SLM Specifications

Model Numbers	RS-SLM-324C	Radio Frequency Cable Security Seal
Physical	LxWxD	220mm x 110mm x 55mm
	Weight per set	1026.7g
	Color	Orange or Blue
Environmental	Temperature	-30C to 70C
	Humidity	95% noncondensing
	Vibrations and Shock	MIL-STD-810-G
	Weatherproofing	IP67
Wireless	Frequency	ISM 2.4GHz QFSK modulation
	Active Transmission Power	<18dBm (~100mW)
	Range	200m L.O.S
	Protocol	Proprietary
GSM/GPRS	Bands	GSM/GPRS/EDGE Quad Band
	SIM	Dual-SIM slots (primary and secondary; GPRS required)
GPS	Channel	66 channel SIRF4 GPS Optional Extended Ephemeris A-GPS
	Antenna	3D Accelerometer Built in GPS Patch Antenna
Electrical	Battery	Rechargeable, 3.7V, 10.4AH Lithium Ion
Mechanical	Break Load	>1000kgf (cable)
		>1500kgf (bolt)

