UltraLink

Flexible input/output modules for system integration
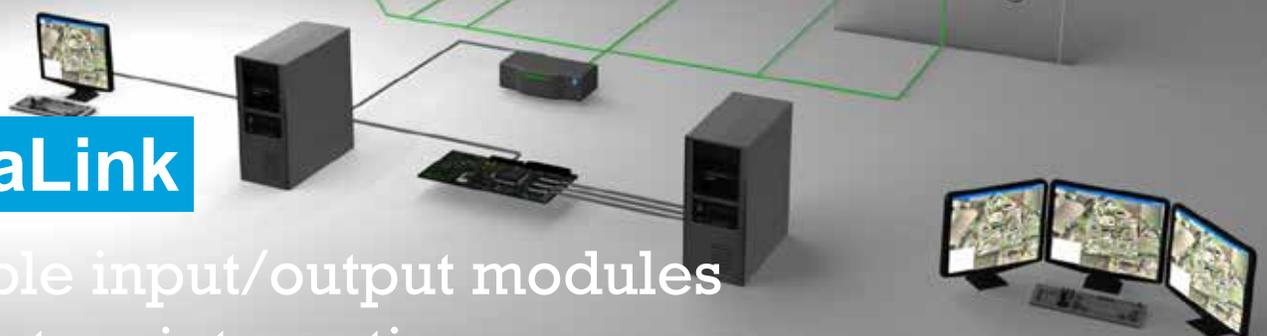
Features & Benefits

- Modular system comprised of processor module, relay module, open-collector output module and dry-contact input module
- Processor module:
  - Hosts Silver network communications card
  - 8 relay outputs
  - 8 dry-contact inputs
  - UltraLink expansion port for adding up to 8 expansion modules
  - USB configuration port
  - Comm/power fail relay
  - Supplies power to connected modules
- Relay output module with 32 relay outputs
- Open-collector output module with 32 outputs
- Dry-contact input module with 32 inputs
- For each processor module a total of up to 272 I/O points can be controlled
- Cable interconnection for power and communication to expansion modules
- All modules are DIN-rail mount, 35 mm (1.38 in) "top hat" section
- Swing out DIN-rail with protective cover for 19" rack
- Optional DIN-rail power supply
- All input/output connections via removable terminal blocks
- Rated for indoor and outdoor use

SYSTEM INTEGRATION AND MANAGEMENT

UltraLink Input/Output (I/O) modules are hardware components that provide a range of system integration options. UltraLink I/O modules connect to Senstar's Silver Network™ and provide a range of I/O types, including outputs (relay, open-collector) and supervised dry-contact inputs. UltraLink outputs can be used to transmit alarms from Senstar's family of networked sensors using only Senstar's Network Manager (NM) software. For more sophisticated applications UltraLink I/O modules can be controlled by Senstar's StarNeT™ 1000 Security Management System (SMS) or Alarm Integration Module (AIM) software.

APPLICATION

UltraLink I/O modules are used to receive and/or transmit alarm information as part of an integrated security system. Applications include:

- Converting sensor alarms collected over Senstar's Silver Network to relays or open-collector outputs for input to a third-party Security Management System
- Collecting auxiliary sensor alarms with dry-contact inputs for display with AIM or the StarNeT 1000 Security Management System
- Use with AIM or StarNeT 1000 for sending camera commands to video switcher/Video Management System (VMS) via relays or open-collector outputs
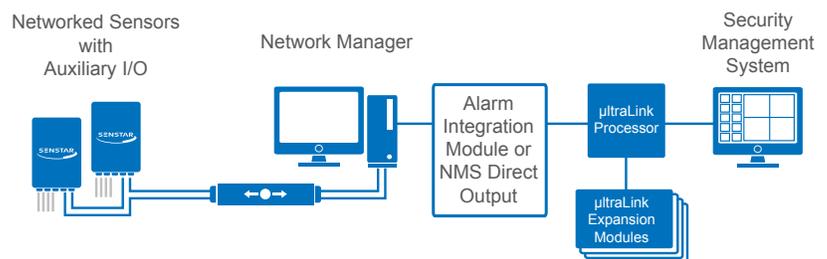
UltraLink I/O modules for relay integration to SMS

SYSTEM CONFIGURATION DESCRIPTION

UltraLink I/O modules are installed as part of an overall Silver Network configuration. The processor connects to the Silver Network via a Silver Network communications card. Up to 8 UltraLink expansion modules can be attached to one processor module. As with other Silver Network devices (such as OmniTrax, XField, FlexZone, and UltraWave), all communications with the UltraLink processor is managed by the NMS software.

The controlling logic to determine the state of the I/O points (i.e., which relay should be active when) can be provided in different ways, including via the StarNeT 1000 SMS, AIM, NMS direct output control capability, or the built-in the Network Manager mode (NM mode).

Senstar's Windows®-based Universal Control Module (UCM) software is used to configure the operation of the relay outputs, open-collector outputs, and dry-contact inputs. The UCM supports direct USB connections to the UltraLink processor or IP connections via the NMS.

NM mode automatically assigns sensor alarms to UltraLink outputs (for networks of up to 9 sensors). No NMS software, computer, or gateway hardware is required. For each sensor, NM mode assigns up to 8 sensor outputs (e.g. alarms, dry contact inputs) to 8 UltraLink outputs (relay or open-collector). NM mode also assigns up to 8 UltraLink inputs to 8 sensor inputs (e.g. relay control states, self-test inputs, audio select). The 8 inputs/outputs from the first sensor are assigned to the I/O of the UltraLink processor, the next 4 sensors are assigned to UltraLink input/output card #1, and the last four sensors to input/output card #2.

TECHNICAL SPECIFICATIONS

Processor
- Hosts one Gen2 Silver Network communications card (EIA-422, multi or single-mode fiber optic, or Ethernet)
- Expansion port for up to 8 Ultralink expansion modules
- USB configuration port
- Programmable fail relay
- 8 relay outputs
- 8 dry-contact inputs
- Operating voltage: 12 to 48 VDC
- Supplies power to connected modules

Relay output module
- 32 relay outputs
- Form-C, 1A, 30 VAC/DC non-inductive load
- Configurable activation type (latching, flash mode, pulse) and timing (0.125 to 10 seconds)
- LED indicator for each relay

Open-collector output module
- 32 open-collector outputs
- Source voltage for outputs provided externally
  - Up to 48 VDC, 100 mA maximum 'on' current

Open-collector output circuit diagram
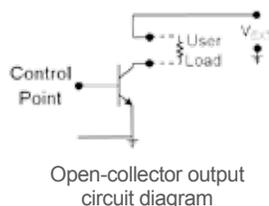
- 4 source voltage connections, each routed to 8 open-collector high-side contacts
- Configurable activation type (latching, flash mode, pulse) and timing (0.125 to 10 seconds)
- LED indicator for each output

Dry-contact input module
- 32 dry-contact inputs
- Programmable options:
  - Input activation: NO or NC
  - Supervision types (none, single, double) and resistor values
  - Required input activation time
  - Noise tolerance and line drop allowance
- Two LEDs per input: alarm, supervision
- Full lightning protection: trazorbs and gas discharge devices on each input

Common µltraLink module specifications
- Mounting: dual locking tabs for 35 mm DIN-rail dimensions, all modules (W/H): 160 x 118 mm (6.3 x 4.65 in)
- All connections except USB made with removable screw-terminal connector; with a high/low terminal arrangement to ease wire routing
- Environment:
  - Temperature: –40 to 70 °C (–40 to 158 °F)
  - Relative humidity: 0 to 95% non-condensing
  - Conformally coated

Swing-out DIN-rail specifications
- 19" rack-mount swing-out mounting plate with 35 mm DIN-rail front and back
- Each DIN-rail can host 2 UltraLink modules with approximately 3 inches of rail-space for other components (e.g. power supplies and/or network interface devices)
- Cover plate provides mechanical protection

Power supply
- 35 mm DIN-rail mount
- 115/230 VAC input, 24 VDC output at 40W

PART	DESCRIPTION
00EM1400	UltraLink processor module
00EM1500	UltraLink dry-contact input module
00EM1600	UltraLink relay module
00EM1700	UltraLink open-collector output module
00MA0100	UltraLink swing-out DIN-rail
00CA0103	UltraLink link cable for linking back to back modules or those on different rails, 58 cm (23 in)
GP0151	Power supply
See UltraLink Sensor Integration datasheet for information on UltraLink software and Silver Network components	

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