

INTRODUCTION

The StarLink[™] MAX Series Sole/Dual-Path Commercial / Residential Fire alarm capture IP communicators are fully supervised, wireless digital two-way subscriber units. The SLE-MAXVI-CFB and **SLE-MAXVI-CFBPS** communicators operate on the Verizon network, the SLE-MAXAI-CFB and SLE-MAXAI-CFBPS on the AT&T network and all models utilize CAT-M1 technology. These devices support both Sole Path and Dual Path communication. Sole Path communication is cellular only and Dual Path communication is cellular and IP, which requires connection to the local network using the on-board Ethernet jack or via Wi-Fi using the optional UL 864 Certified SLE-WIFI-MODULE. The communication mode (Sole Path or Dual Path) requires selection of the appropriate service plan at the point of communicator activation. All models are compatible with most 12/24VDC alarm control panels (always adhere to the documentation provided by the control panel manufacturer). These communicators are for use as the primary means of communication with the central station and do not have backup mode capability. No POTS (Telco Line) connection permitted. These Communicators can also be utilized as Sole Path Cell Communicators. For Commercial Burglary installations, under the armed condition, any loss of communication must be treated as a Burglary Alarm at the Central Station. See WI2140 for programming information.

The following features are included with models that include a **SLE-ULPS-R** power supply:

- Power limited output to the StarLink communicator PC board 12V input terminals
- Battery connection red and black flying leads
- Monitored battery charging and Active battery test circuits
- StarLink communicator trouble input (from StarLink PC board PGM1 terminal to detect StarLink communicator trouble)
- Requires a sealed lead acid min 4AH / max 7AH battery for minimum 24-hour standby time (max charge current 200mA).
- Trouble relay output (C, N/O and N/C terminals) to wire to a panel zone dedicated to "Communicator Trouble" (dry contacts). Remove jumper "J2" isolate relay OUT1 common from ground
- Green **AC ON** LED visible from the exterior housing
- Yellow TROUBLE LED "D4" on PC board. Flashes signify:

One flash: AC fail / brownout Two flashes: Low battery Three flashes: Charging circuit trouble Four flashes: StarLink communicator trouble

The housing-mounted transformer (when provided) is mounted inside its own housing compartment with a replaceable UL Certified .5A fast blow primary fuse. 120VAC connections are to be made by a licensed electrician using suitable connectors, in accordance with N.E.C. and local code requirements.

The StarLink **MAX** Series of Communicators are provided with two antennas. Only one antenna is active at a time, and should the communicator have a loss of adequate signal strength, the communicator will connect to the tower via the other antenna. If neither antenna can connect to the tower within 200 seconds,

StarLink[™] SLE Commercial Sole/Dual-Path Alarm Communicators SLE-MAXVI-CFB & SLE-MAXAI-CFB SLE-MAXVI-CFBPS & SLE-MAXAI-CFBPS Submittal Data Sheet

The model names are:

SLE-MAXVI-CFB & SLE-MAXAI-CFB: Commercial / Residential Fire / Burglary CAT-M1 TCP/IP Communicators in red metal housing.

SLE-MAXVI-CFBPS & SLE-MAXAI-CFBPS: Commercial / Residential Fire / Burglary CAT-M1 TCP/IP Communicators in red metal housing with SLE-ULPS-R power supply and 16.5V / 20VA transformer mounted inside housing.



<u>a trouble output will be activated</u>. If using an external antenna such as from the NAPCO StarLink **SLE-ANTEXTXXX** Series of Extended Antenna Kits, connect it to the left antenna connector.

StarLink Fire Self-Supervision

NFPA 72 requires that any fire communicator trouble be locally annunciated by the fire panel within 200 seconds of the trouble. The troubles include loss of signal, NOC supervision check-in failure, etc. The StarLink MAX Fire communicator models include a "Self-Supervising Fire Communicator" feature that allows the communicator to annunciate a communication trouble without the need for wiring to an FACP zone input or any FACP reprogramming. This is accomplished by dropping the emulated phone line voltage to the FACP secondary phone line, causing the FACP to annunciate communication trouble. To enable Self-Supervision, simply remove Jumper JP2. Note that when using Self-Supervision, some FACPs may require the Jumper J7 shunt to be removed for the Primary Phone line to restore correctly. To also report a communicator trouble to the central station, enable the feature "Tip/Ring Wiring Fault Report" in the Advanced tab in the StarLink NOC.

ADDITIONAL COMPONENTS

In addition to the models listed above, the following subassemblies are available:

SLE-ULPS-R - Power Supply. Required for installations where the control panel cannot provide the Auxiliary power required to operate the StarLink communicator. Uses a standard 4AH / 12V minimum (7AH maximum, required with optional Wi-Fi Module) rechargeable battery to provide communicator standby power. Requires connection to either the model NAPCO TRF12/T123 (16.5V / 20VA) external plug-in transformer or the chassis-mounted 16.5VAC / 20VA transformer affixed inside the housing (see wiring diagrams further in this manual). Note: For models without the SLE-ULPS-R, connect the

communicator terminals 1 and 2 to the control panel Aux Power terminals (observing polarity).

SLE-WIFI-MODULE - Allows your NAPCO StarLink[™] device to connect to the Internet by means of a wireless (Wi-Fi) link, eliminating a wired Ethernet cable connection. Note: 7AH battery required when using the SLE-WIFI-MODULE. For more information, see WI2191. Not UL Certified for Commercial or Residential Burglary.

SLE-DLCBL - Download Cable, 6 feet

- SLE-ANTEXT30 Antenna kit* with 30 feet of LMR 300 cable.
- SLE-ANTEXT50 Antenna kit* with 50 feet of LMR 300 cable.
- **SLE-ANTEXT75** Antenna kit* with 75 feet of LMR 400 cable.
- SLE-ANTEXT100 Antenna kit* with 100 feet of LMR 400 cable.
- **SLE-ANTEXT04** Antenna kit * with 4 feet of LMR 300 cable. Ideal for installations that may require a few extras dBs of gain but running the external cable may not be practical.
- **GEM-Tamperkit** Tamper switches and screws to protect metal housing.

SPECIFICATIONS

The following specifications apply to all StarLink communicator models unless otherwise stated:

Electrical Ratings for 120VAC, 60Hz

For Models with Power Supply (SLE-MAXVI-CFBPS and SLE-MAXAI-CFBPS)

- Input Voltage: 120VAC nominal
- Input Current: 200mA maximum
- Maximum Charging Current: 200mA

Electrical Ratings for +12V / 24V

For Models without Power Supply (SLE-MAXVI-CFB and SLE-MAXAI-CFB) $^{^{\dagger}}$

- Input Voltage: 10-24VDC regulated (power-limited output from UL Certified control panel Aux/Remote Fire Power).
- Input Current: 10VDC standby: 115mA
 - 12VDC standby: 101mA 15VDC standby: 92mA 24VDC standby: 85mA

Wi-Fi Module: (Optional) Add 45mA to the above. (With peak RF transmission current of 325mA).

Electrical Ratings for the IN 1 Fire Input:

- Input Voltage: 9-25VDC.
- Maximum Input Current: Up to 2mA from FACP NAC circuit

Electrical Ratings for IN 2, IN 3, IN 4, and IN 5:

(Inputs IN 2, IN 3, IN 4, and IN 5 are Class B)

- Maximum Loop Voltage: 25VDC.
- Maximum Loop Current: 1.2mA
- End of Line Resistor (EOLR) Value: 10K (2 req'd)

Electrical Ratings for PGM3 Output:

- Open Collector Output: Maximum Voltage 3V when active; 25V maximum when not active.
- Maximum PGM Sink Current: 50mA (up to 15VDC), 25mA (15.1VDC - 25VDC)

Physical (W x H x D)

- Metal Housing: 11½ x 9½ x 3½" (29.2 x 24.1 x 8.9cm)
- Mounting: Metal housing includes two keyhole slots for wall mounting
- Antenna Length: 8.25" (21cm)

Environmental

- Operating Temperature: 0°C 49°C (32°F 120°F)
- Humidity: Maximum 93% Non-Condensing
- Indoor / dry location use only

AGENCY LISTINGS



- UL 864 Standard For Control Units and Accessories For Fire Alarm Systems, 10th Edition
- UL 1610 Standard For Central-Station Burglar-Alarm Units
- UL 985 Standard For Household Fire Warning System Units
- UL 1023 Standard For Household Burglar-Alarm System Units
- UL 1076 APOU Proprietary Alarm Systems
- UL 365 APAW Police Connect

NOTICE TO AUTHORITIES HAVING JURISDICTION, USERS, INSTALLERS, DEALERS, AND OTHER AFFECTED PARTIES

FIRE PROGRAMMING OPTION	PERMITTED IN UL864? (Y/N)	AVAILABLE SETTINGS	REQUIRED UL 864 SETTINGS
Unattended Remote Downloading	No	Enable / Disable	Disabled (Jumper 1 installed). Also required for Commercial installations. Note: See WI section " Configuration Download / Firmware Updates " for jumper in- structions.
IN2 and IN3 Unsupervised	Yes	Supervised / Unsupervised	Unsupervised using conduit within 20 feet of FACP (default). If not using conduit, install Jumpers 4 and 5 and EOL Resistors. Inputs 2 an 3 can be unsupervised with jumpers 4 and 5 removed; IN4 and IN5 always require EOLR
7 Day Supervision, Communicator to NOC	No	200 seconds, 5 minutes, 6 minutes, 60 minutes, 6 hours, 7 days	200 seconds, 5 minutes, 60 minutes. 6 Hours permitted in Commercial Fire UL 864 with Dual Path enabled.
Trouble on Communicator or IP Path (Annunciate / Report)	Yes	Either Path or Both Paths	Either Path (annunciation and report of trouble)
Wi-Fi Module	Yes	Enable / Disable	May be enabled as a primary reporting path for Fire

[†]For Commercial Fire installations, a UL Certified Fire Alarm regulated power supply or FACP regulated auxiliary output is required.

*All antenna kits include high quality/low loss LMR 300 or 400 Coax Type N male to SMA male terminated cable, all mounting hardware and StarLink SLE-ANTEXT-ISO Commercial Fire Ground Fault Isolation Plate to ensure that the external antenna will not cause ground fault system troubles. (Any suitable external cellular antenna is permitted by UL). Always follow the manufacturer's installation instructions. **Note:** Antennas are not Certified by UL.