

# Gemini™ X255 zone hybrid control

## Control panel features

- 8 to 255 zones, hardwire or wireless zones from GEM EZM8 zone-expansion modules and RP1/K1 4-zone keypads or wireless points using Gemini receivers
- Including up to 8 2-wire fire zones
- Up to 195 individually coded users, each with a programmable authority level
- Exclusive RS232 panel-port supports PC home automation/ networking integration for 9600 baud comprehensive communications
- Fuseless maintenance-free operation
- 8 End-of-line-resistor burglary zones programmable for area, exit/entry delay, interior, follower, day zone, chime, fire option, sensor watch, swinger shutdown, zone anding and a variety of other features
- 3 on-board relay outputs; expandable to 99
- Three keypad panics: fire, police & auxiliary
- Up to 8 independent area partitions
- Up to 8 separate access stations for up to 195 users
- Up to 64 separately-addressable X-10 devices with the GEM-X10KIT
- English-language prompts & system status messages from keypad (GEM-RP1CAe2 installed "with 255 support" only)
- User-customized zone descriptions, reprogrammable as required
- Supports 2-wire and 4-wire smoke detectors
- Reports alarms, restores and troubles by zone
- 255 event schedule
- 800 event log
- Overview mode permits monitoring and control of total system from one keypad
- Supports up to 4 RF receivers
- Guard-tour programmable for start time, tour length, and check points (tour stations)
- 2 programmable entry delay times
- 2 interior-bypass groups
- Dynamic battery test interrupts charging and places battery under load every four hours
- Chime by zone; programmable duration
- Non-volatile RAM retains memory during power losses
- PCD-Windows programmable
- Auto-download log
- Exclusive V.A.L.I.D.™ FEATURE (Verifying Automatic Line Integrity Diagnostic) reduces false alarms due to changes in line resistance

## Communicator features

- Compatible with all major receiver formats, including BFSK, 4/2, Modem 2, SIA, 4/3/1, 4 + 2 Express and Point ID
- Rotary dial and TouchTone™ with rotary backup
- 3 20-digit telephone numbers
- Backup reporting; double reporting; split reporting by user
- 195 User codes with opening/closing reporting by user
- AC failure reporting with programmable report delay
- Supervised telephone line cut with programmable delay
- Pager capability

## Specifications

**Operating temperature:** 0-49°C (32-120°F)  
**Input power:** 16.5Vac via Class 2 Plug-In 40VA Transformer, supplied  
**Loop voltage:** 10-13VAC

**Loop current:** 2.5mA with 2.2ohm end-of-line resistor (model EOL2.2K); 5mA for 2-wire smoke-detector zones

**Loop resistance:** 300W max.; 50W for 2-wire smoke detector zones

**Relay outputs** (burglary; reset; aux): wet, 12Vdc, 1.2A max.; dry (cut related jumper for dry contacts), SPDT contacts 24Vdc, 2A

**Auxiliary power output:** 12 Vdc regulated  
**Remote power output:** 12Vdc regulated (for keypads) 750 mA combined Standby Current (Remote Power + Aux. Power + Reset Relay Power)

**Standby time:** Residential fire/burglary & commercial burglary, 4 hours minimum

**EZM Module:** GEM-EZM8: input, 50mA (including PGM Output) PGM output: 5mA, 12V special application

**Keypad current:**  
 GEM-RP1CAe2, GEM K1CA: 100mA; 35mA if back lighting is disabled (cut W1, W2 & W3) PGM output: 5mA, 12V special application

**Maximum number of keypads:** 15 maximum wiring length for each run (#22AWG): 1000' divided by total number of keypads & EZMs on run

**Keypad Dimensions:** 4 3/8" x 5 7/8" x 1 1/6" (HWD); 11.1cm x 14.9cm x 2.7cm (HWD)

## Optional accessories and peripherals

**GEM-EZM8:** 8-Zone expansion zone module (see models labeled "GEM-X255 Support")

**VERI-PHONE:** Two-way voice/listen in system

**GEM-RECV8:** Wireless receiver, 8 points

**GEM-RECV16:** Wireless receiver, 16 points

**GEM-RECV96:** Wireless receiver, 96 points

**GEM-RECV255:** Wireless receiver, 255 points\*

**GEM-TRANS2:** Window/door transmitter, 2-point

**GEM-RTRANS:** Recessed wireless window/door transmitter, 1-point

**GEM-KEYF:** Keyfob transmitter

**GEM-SMK:** Wireless smoke detector

**GEM-PIR:** Wireless PIR, 50x50'

**GEM-PIRPET:** Wireless 40 lb. pet immunity PIR

**GEM-DT:** Wireless Adaptive® Dual Technology sensor, 40x40'

**GEM-GB:** Wireless glass break detector

**GEM-WP PANIC:** Waterproof panic button/pendant

**GEM-HEAT:** Rate of rise heat detector

**2 WAYUNIVKFKIT:** 2 Way LCD keyfob & receiver

## Home/facilities automation:

**GEM-RS232KIT:** Alarm-to-PC interface for 100% 2-way intercommunications with a growing number of leading PC automation software packages (including, but not limited to, IBM Home Director™, Savoy Cyberhouse™, Crestron, Phast, etc.)

**GEM-DEVELOPER:** System development professional's protocol for custom programming seamless integration with Gemini RS232 port communications.

**GEM-X10 Interface Module:** Provides programming & scheduler-integrated X-10 device support.

**RM3008:** relay module

**M278:** Line-reversal module

**PS3002:** Power-supply module, 13.2Vdc, 1.9A

**EOL130:** 2-Wire fire zone resistor, 130ohm, 3ohm

**EOL2.2K:** End-of-line resistor assembly, 2.2ohm for fire circuit

**FT2200:** EOL relay/resistor supervisory module

**RB1000:** Relay board

**RBAT4:** Rechargeable battery, 12Vdc, 4AH

**RBATH1:** Dual battery harness

**RPB-3:** Universal junction box

**TRF11:** Transformer, 16Vac/40VA, Class 2

**WL1:** Wire assembly with lug connector

\*Consult panel documentation for UL restrictions which may apply to UL installations using upwards of 200 wireless-only points

## Ordering information

- **GEM-X255:** Super Expandable Hybrid Control Panel & Transformer
- **GEM-RP1CAe2:** 32-Character EZ-Read Backlit LCD Keypad with 4 EOL Zone Expansion Module built-in (See models labeled "GEM-X255 Support"!)
- **GEMK1CA:** Keypad same as above with Stay & Away functions.
- **StarLink SL-1:** Backup wireless receiver for all alarm panel brands
- **NAPCO NETLINK™** Intranet/Internet Alarm Reporting Components (for specs see website, or literature # A482).
- **GeminiAccess™** economically add up to 8 doors of access control to Gemini Panels. Several paks are available (for specs see website, or literature #A481).

Compatible with these standard **Gemini keypads**



**GEMK1CA**  
4 built in zones



**RP1CAe2**  
4 built in zones



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Use with the full Gemini crystal-control wireless line, proven in independent tests to outperform top competitive brands.