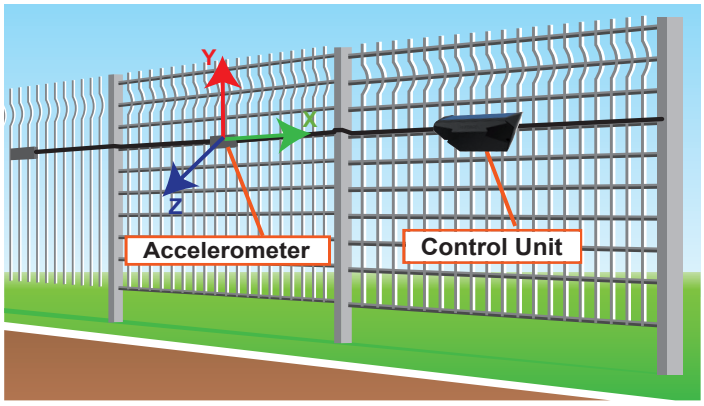
Protech by HIRSCH

ACCELEROMETER-BASED FENCE MOUNTED INTRUSION DETECTION SYSTEM

G-FENCE TECHNICAL SPECIFICATION COMPARISON CHART

KEY FEATURES

- Simplified installation Adapts to site environment
- Remote configuration, maintenance and software updates available
- Different alarm transmission options available
- Available to use with Leading VMS platforms
- Provide long distance Perimeter protection
- Pinpoints the location of the intrusion (within 10 ft. / 3m)



Accelerometer-based fence-mounted intrusion detection technology detects movement on fencing or walls based on an x, y, z axis system. Accelerometers sense dynamic forces of acceleration of the three axes combined, then measures detection signal intensity to trigger alarms.

RANGE OF SYSTEMS

FENCE-MOUNTED INTRUSION DETECTION

A fence-mounted cabling system with attached accelerometer sensors which will detect all attempts at intrusion that use cutting, climbing or lifting of the fence, while disregarding meteorological phenomena such as wind, rain, snow, or other interference from vibration.

COMPARISON CHART

G-Fence Technical Specifications Comparison	 3000	 600	 600Z	 2400	 2400 IP-65
Part number	40670002	40670201	40670205	40670207	93421901
Description	G-Fence 3000 Control Unit	G-Fence 600 Control Unit	G-Fence 600 Z Control Unit	G-Fence 2400 Control Unit	G-Fence 2400-IP65 Control Unit
Product type	Accelerometer-based fence-mounted intrusion detection	Accelerometer-based fence-mounted intrusion detection	Accelerometer-based fence-mounted intrusion detection	Accelerometer-based fence-mounted intrusion detection	Accelerometer-based fence-mounted intrusion detection
API integration	yes, (through maxibus)	no	no	yes	yes
VMS integration	yes (through Maxibus)	no	no	yes, through Smartbridge	yes, through Smartbridge
Rohs Compliant	yes	yes	yes	yes	yes
Electromagnetic compatibility	CE compliant	CE compliant	CE compliant	CE compliant	CE compliant
Operating voltage	5 VDC Solar or 12 VDC grid	12 VDC	12 VDC	12 / 24 VDC	12 / 24 VDC
Current consumption	230 mA	72 mA with ethernet 30 mA w/o ethernet	188 mA with ethernet 138 mA w/o ethernet	200 mA	200 mA
Battery backup	4V 5Ah lead acid	-	-	-	-
Replaceable coin battery	-	no	no	yes	yes
Weight	3.8 lb./ 1.7 Kg	1.6 lb./ 0.7 Kg	1.6 lb./ 0.7 Kg	1.6 lb./ 0.7 Kg	2.2 lb./1.0kg
Operating temperature	-40°F to +158°F (-40°C to +70°C)	-40°F to +158°F (-40°C to +70°C)	-40°F to +158°F (-40°C to +70°C)	-40°F to +158°F (-40°C to +70°C)	-40°F to +158°F (-40°C to +70°C)
Relative humidity	0 – 95% non-condensing	0 – 95% non-condensing	0 – 95% non-condensing	0 – 95% non-condensing	0 – 95% non-condensing
Ingress protection (IP) rating	IP 44	IP 44	IP 44	IP 44	IP 65
Housing mounting	mounting hooks for fence, wall mounting	mounting hooks for fence, wall mounting	mounting hooks for fence, wall mounting	mounting hooks for fence, wall mounting	mounting feet for fence or wall
Sensor/cable mounting	zip tie	zip tie	zip tie	zip tie	zip tie
Dry contact alarm relays	0	2 Alarm + 1 Technical default + 1 Tamper	10 Alarm + 1 Technical default + 1 Tamper	10 Alarm + 1 Technical default + 1 Tamper	10 Alarm + 1 Technical default + 1 Tamper
Intrusion alarms	40, max 128 per com port in the maxibus	2	10	10	10
Technical defect alarm	1	1	1	1	1
Tamper alarm	1	1	1	1	1
RS-485	yes, (2-wire half duplex, 2-wire voltage)	-	-	yes, 2-wire (half duplex)	yes, 2-wire (half duplex)
Alarm conditions	Intrusion, auxiliary contact inputs, technical defect, low battery, tamper	Intrusion, technical defect, tamper	Intrusion, technical defect, tamper	Intrusion, auxiliary contact inputs, technical defect, tamper	Intrusion, auxiliary contact inputs, technical defect, tamper
Alarm transmission modes	RS485 to MAXIBUS	Dry contact	Dry contact	simultaneous Dry contact, API over IP and RS485 to MAXIBUS	simultaneous Dry contact, API over IP and RS485 to MAXIBUS
SD Card (removeable)	n/a	n/a	n/a	yes	yes
Ethernet, RJ-45 plug	no	yes	yes	yes	yes
Sensor cable input (Direction)	2	2	2	2	2
Removeable terminal strip	no	no	no	no	yes
Sensor type	X-Y-Z accelerometer	X-Y-Z accelerometer	X-Y-Z accelerometer	X-Y-Z accelerometer	X-Y-Z accelerometer
Cable calibration	auto	auto	auto	auto	auto
Area of detection per sensor element	3 meters (9.8 feet)	3 meters (9.8 feet)	3 meters (9.8 feet)	3 meters (9.8 feet)	3 meters (9.8 feet)

COMPETITIVE ADVANTAGES

- *EASY TO INSTALL AND MAINTAIN*
- *ECONOMICAL SOLUTION in terms of quality-to-price*
- *CAN PROTECT MULTIPLE COMPLEX PERIMETERS*
- *RELIABILITY Highest Probability of Detection & Lowest False/Nuisance Alarm Rates (NAR/FAR) in market.*

Cable rolls come with pre-installed sensors embedded -1 sensor every 9.8 feet (3 meters).

G-Fence Technical Specifications Comparison	 3000	 600	 600Z	 2400	 2400 IP-65
Part number	40670002	40670201	40670205	40670207	93421901
Rolls of detection cables per control unit	2	6	6	6	6
Maximum number of sensors per direction	40	120	120	120	120
Max sensors per control unit	80	240	240	240	240
Distance per direction (on 8ft fence panel)	328 ft (100 m)	984 ft (300 m)	984 ft (300 m)	984 ft (300 m)	984 ft (300 m)
Max distance per direction (on 10ft fence panel)	393 ft (120 m)	1181 ft (360 m)	1181 ft (360 m)	1181 ft (360 m)	1181 ft (360 m)
Distance per control unit (on 8ft fence panel)	656 ft (200 m)	1968 ft (600 m)	1968 ft (600 m)	1968 ft (600m)	1968 ft (600 m)
Max distance per control unit (on 10ft fence panel)	787 ft (240 m)	2362 ft (720 m)	2362 ft (720 m)	2362 ft (720 m)	2362 ft (720 m)
Maximum control units per system	16 per Maxibus com port	1, Standalone Unit	1, Standalone Unit	4 per Maxibus com port	4 per Maxibus com port
Maximum length of non-detecting cable per direction	164 ft (50 m)	656 ft (200 m)	656 ft (200 m)	656 ft (200 m)	656 ft (200 m)
Maximum distance per control unit with dry contact	n/a	2362 ft (720 m)	2362 ft (720 m)	2362 ft (720 m)	2362 ft (720 m)
Maximum distance through a Maxibus	2 miles (3200 m) per Maxibus com port	n/a	n/a	1.5 miles (2400 m) per com port	1.5 miles (2400 m) per com port
Maximum distance through software like SmartBridge or PRO-MAP	n/a	n/a	n/a	256 IP devices limit for Smart Bridge up to 90 miles (144 km), no limit for PRO-MAP	256 IP devices limit for Smart Bridge up to 90 miles (144 km), no limit for PRO-MAP
Optional reinforced cable	yes	yes	yes	yes	yes
Auxiliary inputs	2	-	-	2	2
Portalis integration	yes	no	no	yes	yes
Gate Connector integration	yes	yes	yes	yes	yes
Configuration setup	Control Unit or Cartography software	Control Unit or on PC	Control Unit or on PC	Control Unit, PC, or MAXIBUS hub	Control Unit, PC, or MAXIBUS hub
Cable cut response time	5<t<30 sec	t<30sec	t<30sec	7s<t<24hr	7s<t<24hr
Event log history	1000 events	1000 events	1000 events	50 000 events	50 000 events
Detection zones per control unit	40, max 128 per com port in the maxibus	2	10	10	10
Sensitivity threshold adjustment	level 1 to 100 per direction or sensor	level 1 to 16 per direction or sensor	level 1 to 16 per direction or sensor	level 1 to 16 per direction or sensor	level 1 to 16 per direction or sensor
Configure alarm detection for impacts above threshold	1 to 3 per segment between control units	1 to 10 per direction	1 to 10 per zone	1 to 10 per zone	1 to 10 per zone
Adjustable events window and time between events	yes	no	no	no	no
Views number of adjacent sensors in alarm	yes per segment between two control units	no	no	no	no
Revision updates	Factory	Factory	Factory	SD card, remote via control unit	SD card, remote via control unit
Remote configuration	yes (through Maxibus)	yes	yes	yes	yes
Remote updates	n/a	n/a	n/a	yes	yes
Clock settings (local/network)	n/a	RTC	RTC	RTC	RTC
IP protocol	n/a	Static TCP/IPv4	Static TCP/IPv4	Static TCP/IPv4	Static TCP/IPv4

INNOVATIVE APPROACH

TO MEET YOUR REQUIREMENTS

To address the special requirements of certain projects, we have developed products that can adapt to any applications.

REINFORCED CABLE

FOR BARBED AND RAZOR WIRE APPLICATIONS

EXTRA CABLE PROTECTION

- *For installation on barbed and razor wire where a standard cable could be damaged.*

SPECIAL APPLICATIONS

FOR SPECIFIC REQUIREMENTS

ON WALLS OR SIDING

- *Concrete fencing*
- *Inside the building to be protected*

Built-In Quality and performance

PROTECH's intrusion detection sensors and cables are engineered to provide tremendous reliability and performance. Our innovative sensor technologies have been tested and approved for use across many industries, from high security military and correctional markets to envionmentally challenging applications found in electrical utility substations, nuclear and chemical facilities.

Protection Technologies, Inc. - 529 Vista Blvd - Sparks, NV 89434 - USA **www.protechusa.com**

Toll Free: 1-800-428-9662 (775) 856-7333 I (775) 856 7658 I sales@protechusa.com