

3D MEMS FENCE SENSOR SYSTEM

# SHIUX MEMS PRO2

1500 m

NEW



80  
ZONES



FUZZY LOGIC  
INSIDE



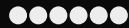
REDUNDANCY



IP-READY PoE



PIN POINT  
LOCATION 1M



6 YEAR WARRANTY

100%  
screwless

NEW RIGID AND MESH FENCE INTRUSION DETECTION SYSTEM



EXTREME SECURITY

SINCE 1974

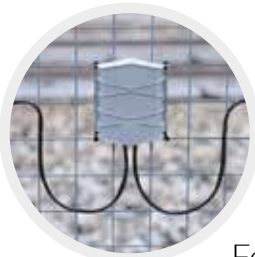
V 1.0



# SIOUX MEMS PRO2 1500 m

**SIOUX PRO2** is the brand-new version of CIAS' fence-mounted intrusion detection system for perimeter protection which since 2012 has been installed with great results on many sites, always with high-security requirements and specifications. The Sioux system has also been awarded numerous prestigious prizes. The system, which detects fence cutting, climbing and displacement, comprises up to 140 MEMS sensors, sensitive on all three spatial axes, for each of two branches monitored by the central controller. These sensors are clustered in groups of 7, with each cluster made by 1 master-sensor and 6 slave-sensors. Each Master sensor receives by its Slave sensors the electrical signal relevant to the detected vibration on the fence, digitalizes and transmits it to the Controller Unit. Via Sioux-Test Pro, or via Relays with the innovative Touch&Zone function, the 280 MEMS sensors in the array can be divided into up to 80 alarm zones.

## HIGHLIGHTS NEW



For any  
 fence type

Double gasket

No fixing screws

Fixing with ties



Special  
 bracket

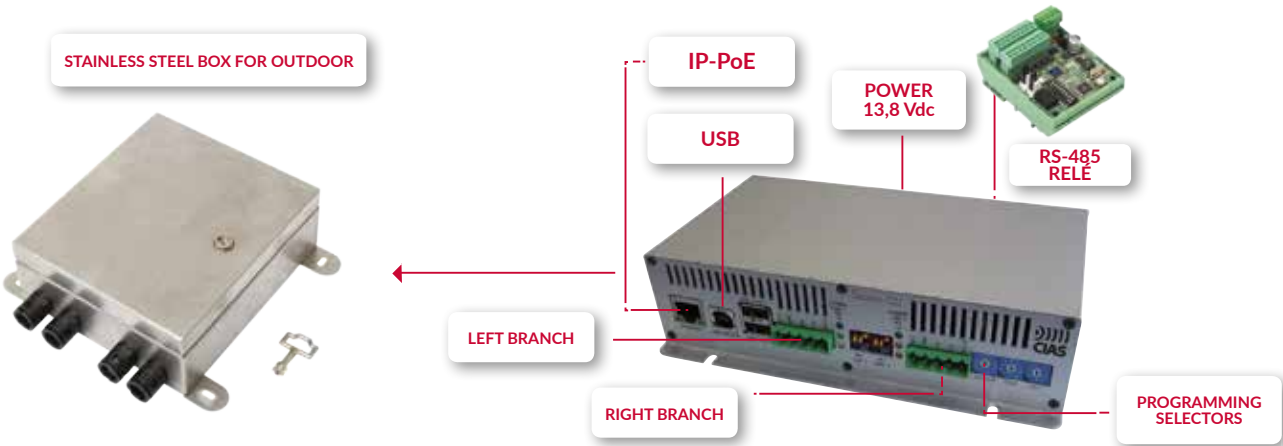
IP grade: IP66

Anti-removal inclinometric  
 embedded tool

Extra accessory: special  
 anti-removal bracket



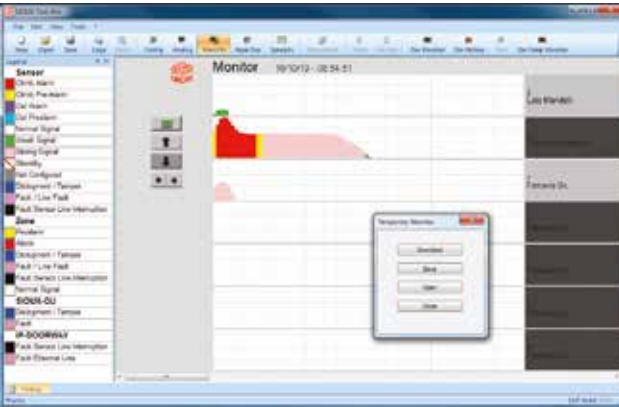
## SIOUX-CONTROLLER PRO2



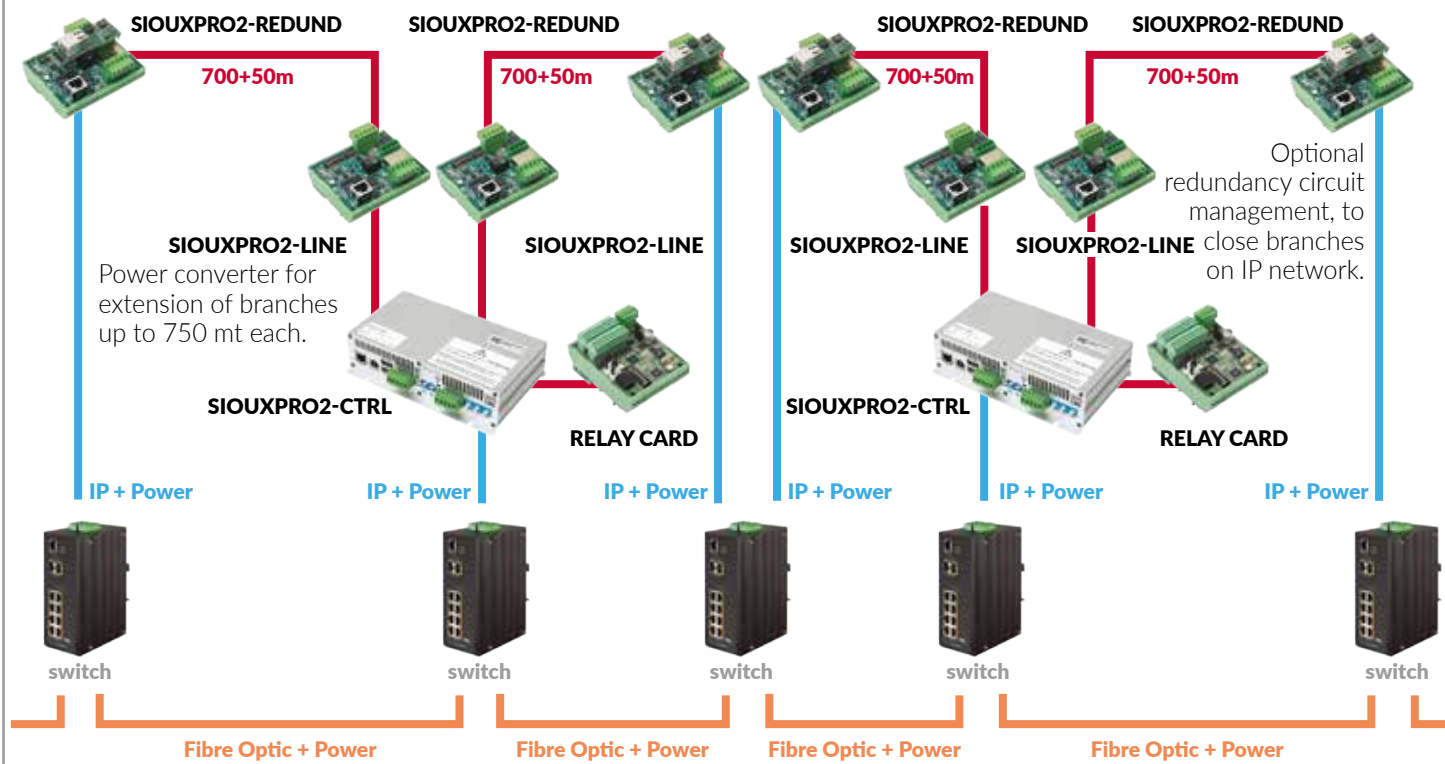
## REDUNDANCY AND LINE INSULATORS

The new release of **SIOUX PRO** introduces a very important feature: cable cut-immunity. This capability insures that each branch of the Sioux sensor array remains fully functional even if the connection cable between sensors is cut in one location. This feature is of utmost importance in very high-risk sites. It is implemented by putting a special module at the end of each of the 2 MEMS sensor branches to provide connectivity to the TCP/IP network. Moreover, up to 19 isolators can be added per each branch, to make it short-circuit proof in case of cutting of the communication cable.

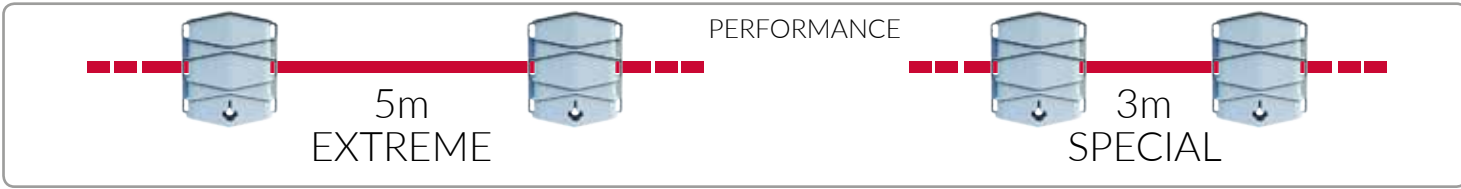
SIOUX  
 SELF  
 HEALING  
 RING



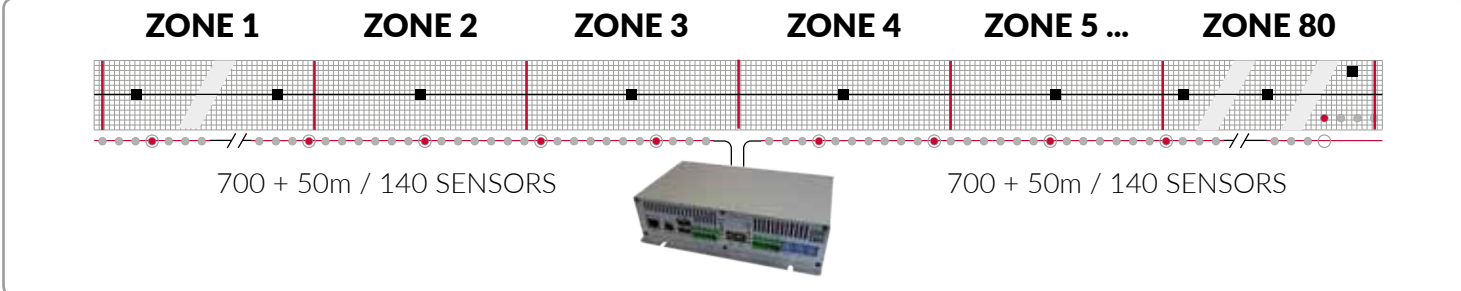
## REDUNDANCY CONFIGURATION



## SENSORS INTERAXLE SPACING



## SYSTEM DETAIL



## SPECIFICATIONS

|                                                                                                                          |                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| SENSOR TYPE                                                                                                              | MEMS ACCELEROMETER                                                                        |
| DETECTION                                                                                                                | CLIMBING, CUT AND FENCE DISPLACEMENT WITH ADJUSTABLE INCLINATION                          |
| COVERAGE                                                                                                                 | UP TO 1400 + 100m WITH A SINGLE CONTROL UNIT                                              |
| POWER SUPPLY                                                                                                             | 13,8 Vdc OR PoE CLASS III (POWER OVER ETHERNET IEEE802.3af)                               |
| NUMBER OF ZONES                                                                                                          | UP TO 80 ZONES PER PROCESSOR UNIT                                                         |
| ZONE LENGTH                                                                                                              | EASILY DEFINABLE USING PC-BASED CONFIGURATION SOFTWARE OR SIMPLE <b>TOUCH &amp; ZONE™</b> |
| PROBABILITY OF DETECTION (POD)                                                                                           | 98%                                                                                       |
| FALSE ALARM RATE                                                                                                         | (FAR) : 8/1500m/YEAR                                                                      |
| DETECTION HEIGHT                                                                                                         | UP TO 6m                                                                                  |
| CONSUMPTION                                                                                                              | 10W AT 13,8Vdc – 10W WITH PoE                                                             |
| IP GRADE                                                                                                                 | IP66                                                                                      |
| TEMPERATURE                                                                                                              | -40°C TO +70°C                                                                            |
| FENCE TYPES                                                                                                              | CHAIN-LINK, WELDED MESH, RIGID FENCE                                                      |
| CONFIGURATION AND CALIBRATION SOFTWARE                                                                                   | SIOUX-TEST PRO FOR LOCAL OR REMOTE MANAGEMENT                                             |
| WARRANTY                                                                                                                 | 6 YEARS                                                                                   |
| SPECIAL OUTPUTS                                                                                                          | RS 485 AND ETHERNET FOR IB-SYSTEM IP                                                      |
| RELAYS OUTPUTS                                                                                                           | UP TO 80 DRY RELAY CONTACTS ON RS-485 ALARM / TAMPER / FAILURE / PRE-ALARM / NO ANSWER    |
| MTBF (MEAN TIME BEFORE FAILURE)                                                                                          | UP TO 150.000 HOURS                                                                       |
| MTTR (MEAN TIME TO REPAIR)                                                                                               | 5 MINUTES                                                                                 |
| MEMORY                                                                                                                   | EVENT LOGS UP TO 10 YEARS                                                                 |
| SENSOR'S DIMENSION AND COLOR                                                                                             | 117MM X 131MM X 50MM / RAL 7040                                                           |
| SPECIAL BRACKET                                                                                                          | SPECIAL BRACKET WITH ANTI-DISPLACEMENT ELECTRONIC TOOL                                    |
| SDK AVAILABLE FOR FULL INTEGRATION WITH THIRD PARTY SYSTEMS<br>(PROVIDED WITH PINPOINT OF ALARM WITH 1 METER RESOLUTION) |                                                                                           |

### INTEGRATED WITH:



**milestone**  
The open platform company



CIAS RESERVES THE RIGHT TO CHANGE THE SPECIFICATIONS DESCRIBED IN THIS BROCHURE AT ANY TIME WITHOUT PRIOR NOTICE.

SINCE 1974



CIAS ELETTRONICA S.R.L.  
VIA DURANDO, 38 | 20158 MILANO | ITALY  
T +39 02 3767161  
WWW.CIAS.IT | INFO@CIAS.IT

