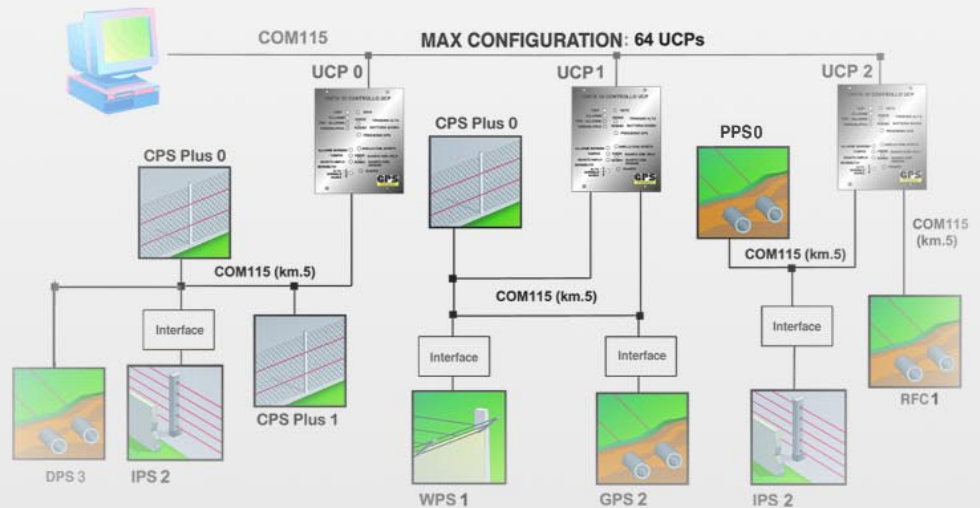




MULTIPLEX 2000 NETWORK

The Multiplex 2000 is a new centralisation network, designed by GPS Standard with the scope to integrate and control different types of anti-intrusion systems. The PPS system, along with all of the perimeter systems produced by GPS can be fully integrated into the Multiplex2000 system.



SYSTEM CHARACTERISTICS

GENERAL DATA

Maximum System Coverage **MPX 2000**

PPS Sensor configuration

Stand Alone version 200 m
Multiplexed version 12800 m

Options

Local Relay Outputs
Local Contact Inputs

System Applications

External

Parameter Set Up

Via COM115 serial line using PC

Parameter Memory

On EEPROM chip (non volatile)

Firmware

Resident on Flash Eeprom, updateable via serial line

MECHANICAL DATA

Cabinet

Metallic, temper protected container completely weather proof.
IP65 protection
Dimensions: [L] 260x [H] 160x [P] 90mm
Weight: 2 Kg
Colour: grey

ENVIRONMENTAL DATA

Operating Temperature

- 30°C ÷ + 70°C
90% Relative Humidity

ELECTRICAL DATA

Voltage

10 ÷ 16 Vdc (12 Volt nom.) Stand Alone version
24 ÷ 55 Vdc (48 Volt nom.) Multiplexed version

Current (max)

60 mA (max) @ 48 Vdc; 220 mA @ 12 Vdc
100 mA (max) @ 48 Vdc; 400 mA @ 12 Vdc RFC and DPS

Outputs available

8 NC Relay contacts (optional in Multiplexed version)

Relay Rating

12 V (max), 100 mA
(NC contacts, 22 Ohm in series)

Inputs available

8 NC / NO (optional in Multiplexed version)

Input/output protection

Using varistors

Self protection

Using Watch-Dog (Internal / External)



UNI EN ISO 9001 CERTIFICATION

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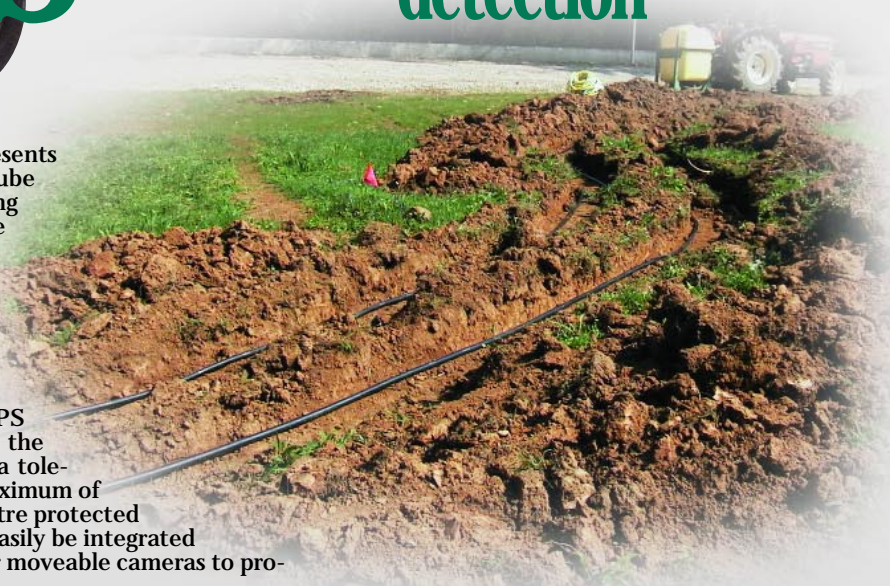
SUBSIDIARY: GPS PERIMETER SYSTEMS LTD - 14 Low Farm Place - Moulton Park - Northampton - NN3 6HY - U.K. - Tel. (0044) 1604/648344

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BURIED PERIMETER PROTECTION PPS

With crossing point detection



The PPS (Perimeter Position System) represents an evolution of the traditional GPS buried tube system., based on the principle of monitoring differences in pressure. Variations in pressure generated by attempts to cross the sensitive zone are detected by sensors in the field. The signals generated are passed to an analysis concentrator unit, consisting of a DSP processor, which evaluates the signal and determines the crossing point within the sensitive zone.

The innovative characteristic of the PPS System is the ability to be able to identify the crossing point within the protected area to a tolerance of 5 metres: providing, therefore, a maximum of 20 crossing points distributed along a 200 metre protected area obtained using a pair of sensors. It can easily be integrated into a video surveillance system with fixed or moveable cameras to provide video verification of intrusions.

The heart of the system is a microprocessor using DSP technology, which offers exceptional capacity for the evaluation and analysis of signals. The signal provided by the sensors is digitised and then analysed in both the time and frequency domains, discriminating common interference signals from genuine alarm signals. Simultaneously the analogue signal from the field is stored in an archive so that, in the case of an alarm, the recording is saved for a predetermined time, before and after the alarm event.

The type of analysis carried out on the signals from the sensors guarantees a high immunity to environmental and atmospheric effects, making this system ideal for installation on sites with high levels of interference, like adjacent railways, roads with heavy or high volumes of traffic. It is of particular value where it is necessary to know the precise crossing point, for example where moveable cameras with presets are installed along the zone.

This system provides a very high detection capability with the false alarms reduced to virtual zero. Another important advantage is the complete invisibility of the system when all the components are installed underground making it virtually impossible to identify the sensitive area.

OPERATIONAL CHARACTERISTICS

The operating principle of the PPS system is based on the detection of pressure differences generated by a target crossing the sensitive zone. The signals generated by two sensors placed at the two ends of the buried tubes of the sensitive zone are evaluated immediately by the concentrator, which can discriminate between attempted intrusions and atmospheric and environmental and determine the point of entry to the sensitive zone with a precision of 5 metres.



PERIPHERAL CHARACTERISTICS

The sensitive zone is the "sensor" part of the system, with the capability to detect the events generated during the course of a violation of the protected area and discriminating against interference (atmospheric and environmental). This is made up of the concentrator, the pair of PPS sensors and the buried tube.

While the buried tube and the PPS sensors generate the sensitive zone delimiting the perimeter of the protected area, the concentrator represents the intelligence of the system, with the capability to analyse, discriminate and signal the events which it has verified along the protected perimeter.