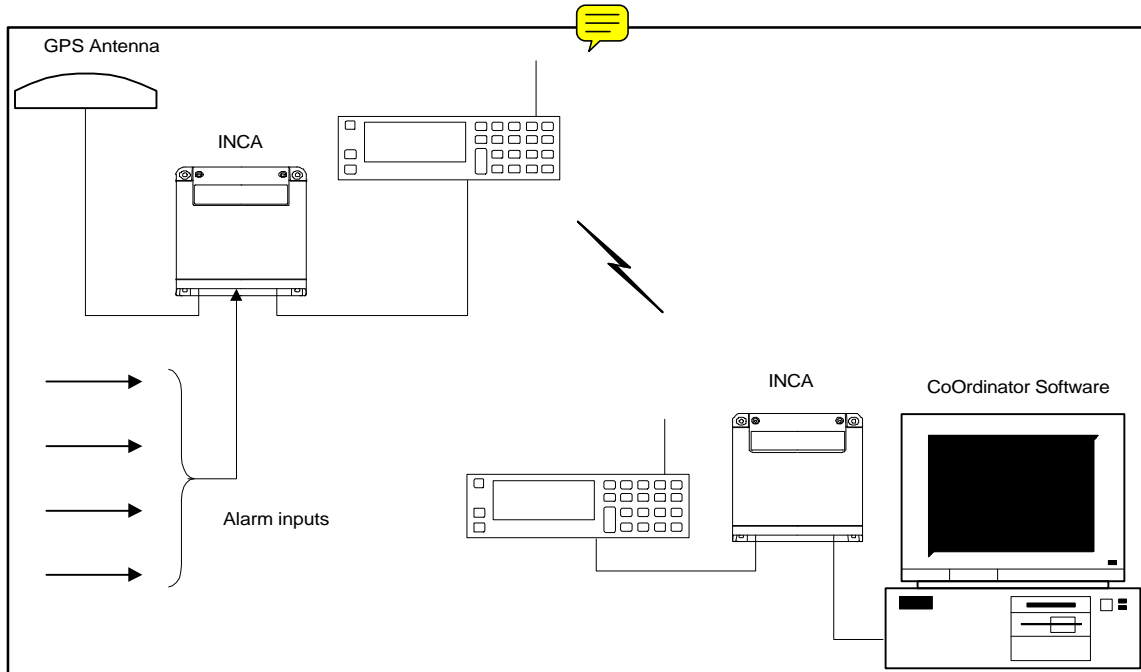


CoOrdinator



FEATURES

- Minimises communications costs
- Records up to 3000 events internally
- Uses MPT or conventional radio
- Controlled remotely
- Differential GPS input
- Supports all popular map formats

SYSTEM OVERVIEW

The CoOrdinator vehicle tracking system enables fleet managers to monitor the location of all their vehicles. Each vehicle is equipped with an INCA GPS transponder that continually monitors the vehicle's location and peripheral equipment.

At the control site, a computer displays vehicle locations on a map. Reports from INCA units update location and status information. Changes in status or alarms can be shown as a different colour on the display.

INCA

Each vehicle mounted INCA generates events in response to changes its position and peripheral equipment. Different events are generated in response to movement, distance, time, speed, location and external inputs. INCA can record these events internally or report them over the radio. This greatly reduces the amount of airtime required to provide useful information about the vehicle.

Over 3000 events can be stored in non-volatile memory. This information can be downloaded over the radio, or can be extracted by a direct cable connection. This is useful for vehicles that regularly make long distance journeys out of communications coverage.

The INCA also has digital inputs, which provide alarm and status information.

GEO-FENCE

Important areas can be defined as geo-fence locations. Whenever INCA enters or leaves a geo-fence location it generates an event. Geo-fence locations also have an effect on most other events. For example, it may only be important to report the vehicle door opening when outside a geo-fence. Up to 50 geo-fence locations can be programmed in each INCA.

Geo-fence locations can be joined together to define a prescribed route, which is important for cash-in-transit or other high value cargoes. If the vehicle deviates from the prescribed route INCA will automatically alert the operator.

EXTERNAL INPUTS

Four external inputs are provided. Typical applications for external inputs are door open/closing, panic alarm, alarm from temperature control equipment, vehicle ignition, etc. Each input will generate an event based on open/close and whether INCA is currently inside a geo-fence or not.

SPECIFICATIONS

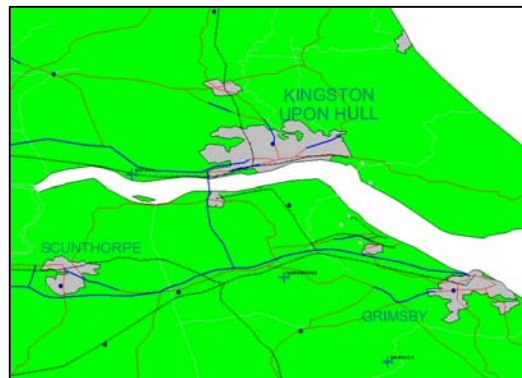
POWER	
Supply voltage	10.8V to 15.6V DC
Reverse input voltage	-15.6V max.
Power Consumption, operating	2W max
Power Consumption, standby	1.5mW max
GPS	
Tracking capability	12 simultaneous satellites
Acquisition time	<15 Seconds hot <45 Seconds warm <120 Seconds cold
RF Input	TNC (active or passive antenna)
Differential Input	RTCM - 104
SERIAL PORT (V28)	
Output voltage	TTL
Output impedance	150Ω
Output short circuit current	±25mA max.
Input Voltage	TTL
Input impedance	10kΩ pulled to +5V
DC INPUTS AND OUTPUTS	
<i>Outputs are Open Collector, with no internal pull-up resistor. Inputs are TTL, with internal pull-up to 5VDC</i>	
Input voltage	High level 2V to 30V Low level -30V to 0.8V
Input resistance	10kΩ, pulled up to 5V
Output external supply	50V max
Output saturation voltage	1.1V max. for 350mA load
Maximum output current	100mA (per output, all outputs on)
ENVIRONMENTAL	
Operating temperature	-20°C to 55°C
Environmental protection	EN60529 IP40
Vibration and shock	RIA20 category 1, class A
EMC emissions	EN55022 class B
EMC susceptibility	EN50082-1
POWER OUTPUT	
Maximum current	48mA with 10.8V input
Short circuit current	18mA with 15.6V input
Output resistance	33Ω
MECHANICAL	
Dimensions	116 (W) x 134 (D) x 33 (H) mm
Mounting	4 fixing holes, centres 100 x 120mm, to suit no. 6 or M3 pan head screws
Weight	750g approx.

POLL

An INCA may be polled at any time for details of its location and state. Poll messages are also available which will cause the vehicle to selectively download the contents of its memory.

DISPLAY SOFTWARE

The Co-Ordinator software displays the location of the vehicles on a map. Co-Ordinator is supplied with a digital map for any part of the world. If required, the user can easily add other digital maps to produce a custom solution.



■ BAPT approved.

QUALITY

APD is totally committed to quality & engineering excellence.



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