

VALUE PROPOSITION

Our VTIS product range can help you save money, increase your competitiveness, and make the ramp a safer environment. Our value proposition is:

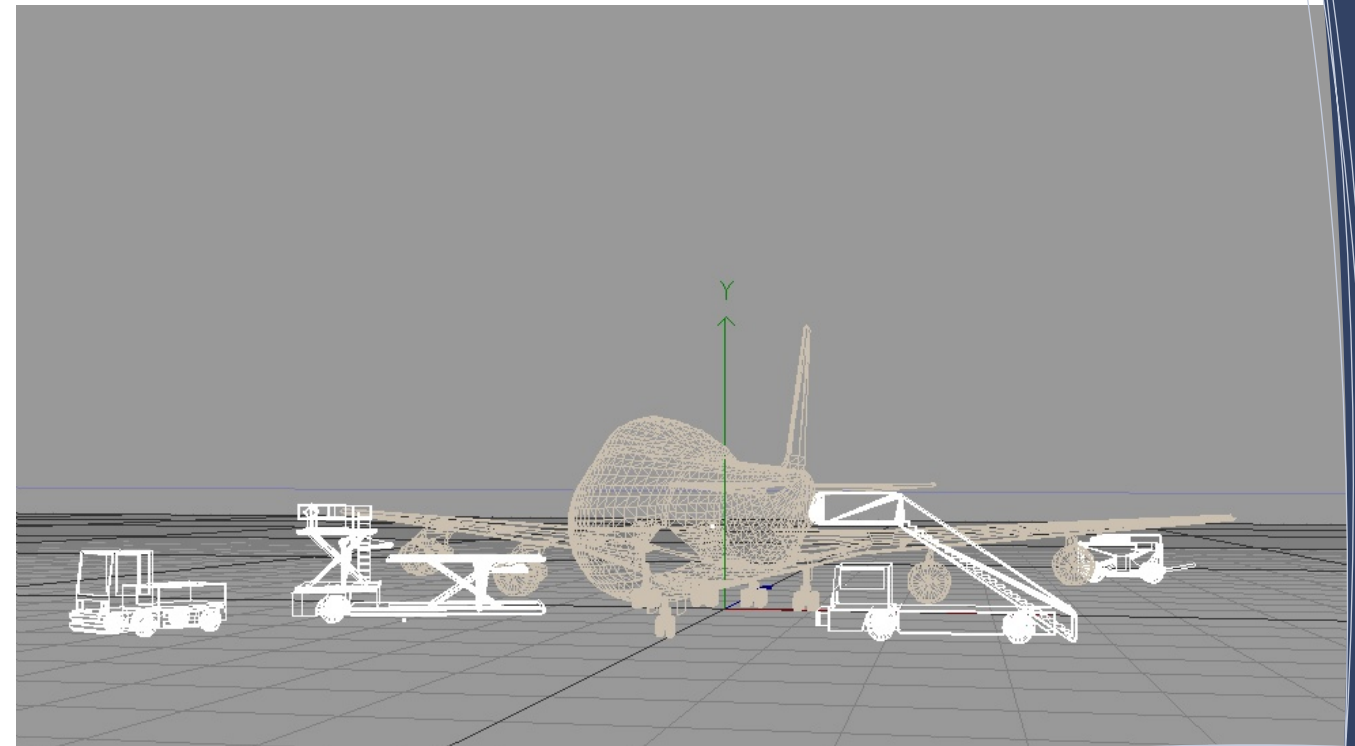
- Increase your operational efficiency, availability and productivity
- Optimise your fleet size — avoid capital expenditure
- Optimise equipment usage
- Increase maintenance efficiency
- Reduce Total Cost of Ownership
- Generate revenue outside the traditional Service Level Agreement—for example, equipment pooling
- Reduce equipment damages
- Reduce fuel use
- Monitor de-icing operations and generate more accurate billing
- Improve your environmental/emissions footprint
- Improve invoicing accuracy
- Enhance ramp security
- Improve ramp safety
- Improve your competitiveness
- Extend asset life and warranty
- Improve response times to asset-related issues
- Independent audit trail for billing and incident reporting
- Demonstrate compliance with environmental and health and safety policies and regulations
- Demonstrate compliance with Service Level Agreements
- Improve management of driver training and licensing

The VTIS management system provides a cost-effective way to track, monitor and manage powered and non-powered assets on the ramp. It provides a scalable, modular infrastructure that can grow with your business, and is equally of benefit for small or large fleets.

VTIS has been designed specifically for the ground handling environment — and our people understand the issues, problems and challenges you face, so we can help ensure that you get a fast return on your investment with us.



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Vehicle Telematics Information System

Measure It — Manage It

value
 quality
 support
 innovation

Our technology — at work for you

REAL-TIME ASSET MANAGEMENT FOR THE GROUND HANDLING INDUSTRY

Pinnacle specialise in providing Ground Support Equipment Owners, Maintainers and Fleet Managers with a range of information from their motorised and non-motorised fleet.

VTIS — our powerful Vehicle Telematics Information System — gives you key performance data from your GSE, such as utilisation, idle/operational time, alarm status and location, to help you to manage your assets more effectively, improve operational efficiency, increase safety and reduce costs.

GSE data is recorded and transmitted using Pinnacle telematics hardware installed on the equipment.

Information from VTIS can be viewed in a variety of ways, for example through web reports, e-mail reports and SMS messages or can be integrated into other management software applications. Equipment location can be displayed on our web-based airport maps, which can also alert you to any problems with your equipment in real-time.

Pinnacle's customers include major Airlines, Ground Handling Companies and GSE Manufacturers, Fleet Managers and Maintenance Companies around the world. With offices in the UK, Amsterdam, Malaysia, Hong Kong and the USA, we are able to service our customers globally.

THE VTIS SOLUTION

• **v-BOX** STAND-ALONE DRIVER ACCESS CONTROL

• **v-TAG** FOR NON-POWERED ASSETS

• **v-HUB** ENGINE HOURS, UTILISATION &

LOCATION DATA LOGGING FOR MOTORISED GSE,

WITH ADD-ON MODULES:

- ⇒ **v-AWARE** COLLISION AWARENESS
- ⇒ **v-TRACK** GSE MAPPING SYSTEM
- ⇒ **v-SPEED** OVERSPEED DETECTION
- ⇒ **v-LOCK** ACCESS CONTROL
- ⇒ **v-DASH** BUSINESS INTELLIGENCE SYSTEM
- ⇒ **v-MODE** IDLE/ACTIVE STATUS MONITORING
- ⇒ **v-BUS** CAN BUS/PLC MONITORING
- ⇒ **v-CELL** BATTERY VOLTAGE MONITORING
- ⇒ **v-ALARM** VEHICLE HEALTH MONITORING
- ⇒ **v-CHARGE** BATTERY MONITORING MODULE
- ⇒ **v-FENCE** GEOFENCING
- ⇒ **v-FUEL** FUEL LEVEL REPORTING
- ⇒ **v-FREEZE** DE-ICING MONITORING
- ⇒ **v-LOG** DRIVER LOG KEYPAD
- ⇒ **v-MAIL** DATA REPORTING SERVICE
- ⇒ **v-VIEW** DATA REPORTING SYSTEM

flexible solutions for your business needs

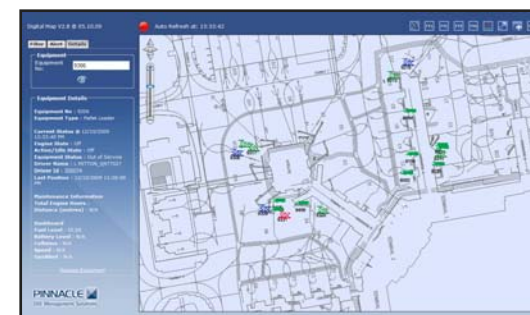
v-BOX is a stand-alone device that provides a secure method of access control for GSE and other equipment with an on-board power source. Stop unauthorised equipment usage, and also record impacts with the optional collision sensor.

v-TAG employs the right technology for your environment and application — RFID, GSM/GPRS or satellite tracking — to easily locate your dollies and other non-powered assets.

v-HUB is the core of our powered equipment tracking system. Centred around our robust, reliable "MN4" hardware platform (with over 10,000 units in the field), **v-HUB** provides key engine usage, utilisation and location data which is transmitted wirelessly to our servers.

v-HUB can be tailored to meet your exact requirements via an ever-expanding range of add-on modules, providing functions such as access control, collision awareness and vehicle alarms. Choose as many or as few modules as you want to get the data you need from your fleet — you can add new modules at any time.

KNOW WHERE YOUR GSE IS, WHO IS USING IT, AND HOW PRODUCTIVE IT IS



All data received from **v-HUB** is processed by our servers and then delivered to you. Location data can be displayed via **v-TRACK** - our web-based airport mapping system, showing not just where your GSE is, but also its current status.



Using our **v-DASH** reporting system customers can see all key data from their fleet and can prepare, generate and export a wide variety of management reports. As it is a web-based system, no special software is required, and you can access your data from any internet-connected computer.



FLEXIBLE SOLUTIONS

The VTIS product range consists of a comprehensive series of standard vehicle information modules — but many of these can be tailored to meet your specific needs. We pride ourselves on our flexible approach and will do our best to make sure you get the solution that best fits your business.



WEB-BASED SYSTEMS

Our information systems are web-based, so you can access your data from any computer anywhere in the world with a live internet connection. There's no need to install any special software. Your data is protected, secure and available 24/7.



IMPLEMENTATION & SUPPORT

We offer a comprehensive Project Management service to ensure that the planning, deployment and lifetime support of our GSE management solutions meet the exacting standards of the Ground Handling Industry. We will help ensure that you get the maximum return on your investment with us as quickly as possible.