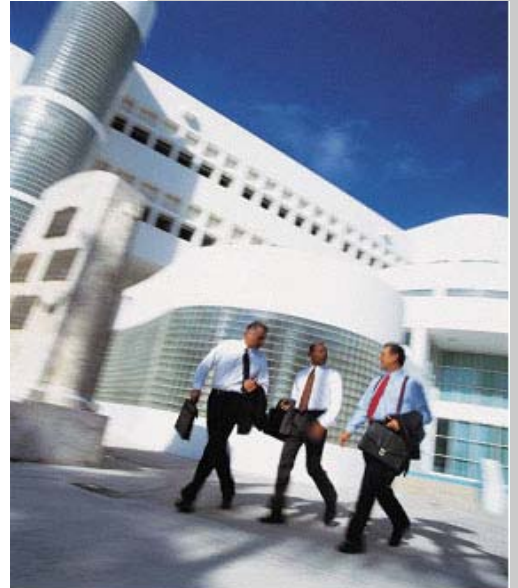


Security Access Control



TagMaster and HID - a joint solution for Security Access Control

- One CombiTag does it all!
- Personal and vehicle access
- More economical than buying two cards
- Plug-n-play installation
- Reduced operating costs

TagMaster



Security Access Control - The Concept

TagMaster introduces the S1260/01 CombiTag - a combination of TagMaster and HID proximity technologies in one convenient, secure and affordable card.

- **Keeping track of people is not always enough!**

The security industry has historically focused on keeping track of individuals. However, with increasing risks for terrorism, sabotage and theft, the focus has shifted to more holistic security thinking. No longer is it sufficient to keep track of the individuals entering the security perimeter, their vehicles must be accounted for as well.

The TagMaster CombiTag makes possible the uniform implementation and management of a security system that encompasses both people and vehicles.

- **Can advanced technologies help reduce cost?**

Society continues to move towards more automated solutions. When considering security, this is not only an issue of cost reduction but also a question of minimizing the risk of human errors. Hands-free applications, such as the use of proximity for personal access, have been successfully introduced into the access control market by HID. In other industries, similar solutions have been applied to vehicles (e.g. parking and road tolls).

Although technology has been available to automate all aspects of security, until now no solution has been packaged and priced in an attractive manner.



- **The CombiTag Solution - combining the best of two worlds!**

Through an alliance with HID, TagMaster introduces its S1260/01 CombiTag. This unique access card combines TagMaster's highly successful 2.45 GHz AVI system with the world's most popular personal access solution, HID's 125 kHz proximity technology. The combined technologies are packed in one convenient, 3 mm thick credit card sized unit.



Key User Advantages

- Convenient - only one personal card to keep track of
- Secure - no need to roll-down the window
- Fast entry - no queing
- Easy to use
- VIP treatment

Key Operator Advantages

- Secure, integrated management of people and vehicle access
- Affordable - less than the cost of two cards
- Plug-n-play installation
- Lower operating costs
- No site licenses required

Security Access Control - The Products

- **The S1260/01 CombiTag**

The TagMaster s1260/01 CombiTag supports two RFID standards: TagMaster's 2.45 GHz long-range Automatic Vehicle Identification (AVI) and HID's 125 kHz proximity technology. The combined technologies are packed in one convenient credit card sized unit, $\frac{1}{10}$ inch (3 mm) thick. The CombiTag is a passive/semi-passive construction that utilizes no power when it is read. Therefore, the tag has a fully predictable lifetime.

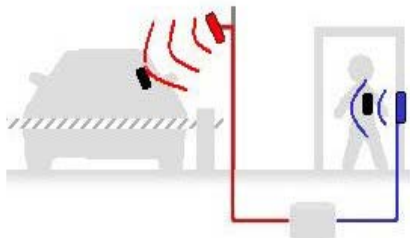


Long-Range Functionality

Any TagMaster reader can read the long-range S1260/01 CombiTag. Each tag is permanently programmed with a 38-bit unique code. The code and a 32-bit checksum are transmitted together, completely eliminating the risk of substitution errors. The read range varies depending on the type of long-range reader and local installation conditions. Typical read ranges are up to 20 feet (6 m) with the S1501/02 PassMan reader and up to 26 feet (8 m) with the S1504/02 Long-Range PassMan reader.

Proximity Functionality

The proximity functionality of the S1260/01 CombiTag can be read by any HID 125 kHz proximity reader. Read range varies depending on proximity reader type and local installation conditions, but is typically from just a few inches with ProxPoint Plus® up to 10 inches (25 cm) with the MaxiProx®. (See www.HIDCorp.com for more information)



Future Options

TagMaster is exploring the possibility of adding other popular options to the CombiTag product, such as the 13.56 MHz smart card technology and personalization.

- **The Readers**

S1260/01 CombiTags can be read by both TagMaster long-range Automatic Vehicle Identification (AVI) readers and HID 125 kHz proximity readers.



Long-Range Readers

The long-range readers are designed for AVI applications, reading S1260/01 CombiTags at long distances, high speeds and in demanding environments. All TagMaster readers can be used to read the CombiTag. This includes the:

- S 1500 WiseMan
- S1501/00 WatchMan
- S1501/02 PassMan
- S1503 WiseMan Long-Range
- S1504/00 WatchMan Long-Range
- S1504/02 PassMan Long-Range
- S1510 HandHeld

The readers support stand-alone and networked operation, including Wiegand, magstripe, RS-232 and RS-485 interfaces. A well-defined reading lobe and multiple channel support allows multiple readers to be located close to each other without cross-reading interference. The air interface features an anti-collision protocol, allowing for multiple CombiTags to be read at the same time.

Proximity Readers

All HID readers that support 125 kHz proximity technology can be used for reading the S1260/01 CombiTag. This includes the:

- ProxPoint Plus®
- ThinLine® II
- MiniProx®
- ProxPro®
- ProxPro® with keypad
- ProxPro® II
- EntryProx®
- MaxiProx®



The proximity readers are designed for personal access applications, reading CombiTags at close range, with high precision and in any environment. The range of proximity readers meet all physical and connectivity demands that can be envisioned.

System Integration

The S1260/01 CombiTag and its readers can be implemented as stand-alone units or integrated with any security or time and attendance system.

- **Standalone Configuration**

When a standalone configuration is needed, choose either the HID EntryProx reader or the TagMaster S1500 or S1503 WiseMan reader. The TagMaster models are equipped with an internal database that can manage 15,000 CombiTags. The CombiTag IDs are easily uploaded and stored in the local entity as normal.

- **Networked Configuration**

Proximity and long-range readers can both exist in a networked configuration. Networking both reader types is the best way to optimize the benefits of the CombiTag. Any of the HID readers listed on the previous page support the Wiegand communication protocol. With the TagMaster readers, choose the S1501/02 or S1504/02 PassMan models, which also support the standard Wiegand communication protocol. Adding a long-range reader to an existing network is a simple question of plug-n-play.

The networked handling of the CombiTag IDs depend on the system and database structure. A typical CombiTag implementation would consist of a database structure where each personal card would have two references tied to it: one for vehicle access and one for the personal access. However, for the open 26-bit format, the CombiTag can be ordered so that a personal card comes with only one reference tied to it; the same for both vehicle access as for personal access.

In an implementation where vehicle and personal access is handled by separate entities within a corporation, the database access and management should be separated.

- **Customized Integrations**

HID and TagMaster provide various alternative integration options based on Clock & Data, RS-232, RS-422, RS-485, etc. If you have special demands for a S1260/01 CombiTag to work with your system, please contact us at sales@tagmaster.se.

TagMaster Company Background

TagMaster is a world-leading supplier of long-range identification systems. By using a technique known as radio frequency identification or RFID, TagMaster's system can automatically identify vehicles accurately at long distances. Having pioneered the development of long-range RFID, TagMaster has introduced the technology into a wide variety of applications, including parking and vehicle access. TagMaster is constantly investing in research and development to ensure its products remain at the leading edge of technology. This continued development safeguards that TagMaster's equipment is manufactured to the highest standards, helping ensure that its customer's requirements for reliability and performance are satisfied. Founded in 1994, TagMaster is a Swedish public company, listed in Stockholm. TagMaster is represented worldwide via a network of distributors, system integrators and OEM partners.

For more information on TagMaster and the CombiTag, please visit our website www.tagmaster.com or contact us at sales@tagmaster.se.

Coding

- **Long-Range**

The S1260/01 CombiTag comes pre-programmed with a 38-bit card number. TagMaster controls the numbers and ensures that no duplicates are manufactured.

- **Proximity**

The CombiTag can be programmed to support HID's 125 kHz proximity coding standard.

26-bit with Facility Code

This is the standard industry format. 8 bits are used for facility codes, 16 bits for card numbers and 2 bits for parity.

HID 37-bit

No facility code, all 37 bits are used for the card number. Not all systems can handle this large data length format. HID controls the numbers and ensures that no duplicate numbers are manufactured.

HID 37-bit with Facility Code

Same as the 37-bit except for 16 bits that are used for facility code. This format is reserved for large customers.

Corporate 1000

A 35-bit format designed to provide large end users with their own custom and highly secure format.

In special cases, longer formats can be supported.

- **Same card number**

For 26-bit and 37-bit with Facility Code the CombiTag can support the same card number for both long-range and proximity. This is typically important for systems that do not support multiple ID entries per individual.

- **Selecting card number**

The CombiTag allows free choice of Facility Codes for the 26 and 37-bit formats (the latter as long as HID allows the code). The CombiTag card numbers can not be selected by the customer.

TagMaster AB

Electrum 410 / Isafjordsgatan 30A
S-164 40 KISTA, Sweden

homepage: www.tagmaster.com
e-mail: sales@tagmaster.se

Phone: +46 8 632 19 50
Fax: +46 8 750 53 62