



Network proximity access control offering seamless expandability









They say that two heads are better than one... So just imagine what 32 heads can do for you!

The Lattice proximity tag reader system gives you the flexibility to start with a single, standalone reader and expand seamlessly into a powerful access control network comprising the L1000 controller and up to 31 Slave Heads. This multi-faceted range is designed to meet the need for a cost-effective, networked access control system. It also offers a sophisticated PC interface providing advanced management and reporting capabilities

Features and benefits

Capacious memory

Lattice is ideal for larger corporate applications where many employees require access, and up to 1000 tags can be learned into the system allocated into 1000 separately identifiable groups known as identities (IDs).

Seamless expandability

The system centres around the L1000 controller that can operate as a standalone reader, or as the 'Master' in a network of up to 31 additional 'Slave Heads' (LSH40). The Lattice system uses an RS485 bus to link all the readers in the network and while network integrity is maintained, all 1000 tags can be configured to grant access on any of the LSH devices. In the event of a network failure, any of the LSH devices can be programmed to store up to 40 unique tags for offline network use and maintenance.

Easy programming of user tags

The CentSys Zap Tags - which fit neatly onto a key ring and can be fitted with an identification label - can be programmed into the system in two ways:

- By using a single 'Administration' tag with the L1000 Master Controller
- By using CentSys' LatticeWARE software, designed specifically for the Lattice reader range

The 'Admin' tag accesses a detailed programming menu, which is navigated using a three-digit LED display on the L1000. The unit doesn't have to be opened to enable programming.

It'll be your hall monitor

There won't be any 'buddy-clocking' with Lattice standing guard! Lattice offers a reliable anti-passback feature, so you know that the integrity of your access control system will never be compromised.

Each reader also provides a door sense input to monitor 'Door Left Open' and 'Door Forced' conditions. The system can be configured to activate a local buzzer and/or trigger an external alarm

It's got great eyesight

Near-sightedness is something that Lattice readers definitely can't be accused of Using the latest 13.56MHz RFID tag technology which is fast becoming a world standard, Lattice is able to deliver an exceptional read range.

Easily configurable outputs

Lattice is a jack of all trades... and master of all of them! Each reader provides a potential-free relay or open collector output to activate the access point door lock or gate motor, traffic barrier, etc. The open collector output combined with the optional SmartSwitch II interface module provides a secure link between the reader and the access point. The L1000 controller provides two outputs: one being a potential-free relay and the second an open collector. All reader outputs can be set for either latched or non-latched operation.

Free-exit for up to 32 doors

The L1000 Master Controller, or the LSH40 Slave Head, if used with its free-exit input option can provide entrance to, or exit from, up to 32 separate doors. By combining a Master and Slave Head, or two Slave Heads, both directions of traffic flow (entrance or exit) through a door can be controlled. Up to 16 doors can be controlled this way.

Reliable memory backup

An elephant never forgets, so the popular saying goes - and, with the Backup Memory Module, neither will your **Lattice** system! This handy little device allows you to conveniently back up all the tags and settings stored in the system should you need to perform a default operation or replace the controller.



Tough as nails (and much better looking)

The readers are weatherproof (IP65 rated) and can be flush or surface mounted. The flush mounted option fits neatly into a 100mm x 50mm (4" x 2") light switch box.

A rugged stainless anti-knock shield is available for outdoor sites where vandalism is likely to be encountered, or where the unit needs to be mounted onto a gooseneck.



The LatticeWARE software is intuitive, easy to use and greatly enhances the functionality of the Lattice system.

The Lattice system, whether a stand-alone reader or network, can be further scaled by adding a PC. The PC or laptop (the Lattice server) is linked to the L1000 via a Lattice Take-up Head (TUH). The TUH provides the system administrator with a convenient tag reader for initial tag take-up and administration.

The LatticeWARE software makes the task of modifying and managing the system far simpler.

Features and benefits

Manage from anywhere within a network

LatticeWARE can also be installed on any computer connected via a LAN to the Lattice server. This means that any computer can be used to view the Lattice network status, perform system management, display reports and configure tags. Added to this, the different access levels allow certain functionality of the Lattice system to be displayed on some PCs and not on others.

Advanced data-logging and reporting capabilities

LatticeWARE can generate sophisticated reports which display pertinent information. User configurable filters can be created which allow for more specific reporting. These reports can be exported in a variety of formats, such as Rich Text, Excel, PDF or Word.

Time-based functionality

The Rolling Stones sang 'Time is on your side', and LatticeWARE gives new meaning to that phrase with advanced time-based functionality.

Timed functions are added to the **Lattice** feature list once a PC is integrated. These features include Event Logging, Time-barring, Timed Anti-passback and Time Lock.



System features

Lattice

Number of tags that can be stored in memory	1000
RS485 network interface	Yes
Number of Slave Heads that can be used with L1000	31
Logging and reporting using a PC	Yes
Administration using a PC	Yes
Time-barring using a PC	Yes
Administration using tags	Yes
Multiple tags per ID reference	Yes
Quick-learn tags facility	Yes
Copy tag facility	Yes
Suspend tag facility	Yes
Total memory erase	Yes
Anti-passback facility	Yes
Number of Anti-possback levels	7
Limited uses counter (999 uses per counter)	4
Securely encrypted tags	Yes
Securely encrypted network	Yes
Firmware upgrade facility	Yes

Technical specifications

Lattice	L1000	LSH	
Input voltage	9V - 12V AC or 12V - 15V DC		
Current draw			
Standby Operating	110 mA 170 mA	110 mA 150 mA	
Tag frequency	13.56 Megahertz		
Read range	80 - 100mm		
Reader dimensions Surface mount Flush mount	129mm H x 90m 124mm H x 86m		
Weight	0.1kg		
Temperature range	-10 to +50° C		
Humidity	0-90% non-condensing		



Reader features

Lattice	L1000	LSH
Standalone capability	Yes	No
Dipswitch configurable network address	No	Yes
Relay time configuration (Off/1 - 254 sec/latch)	Yes	Yes
Open collector output time configuration (Off/1 - 254 sec/latch)	Yes	Yes
Door Open Timer (0 - 255 sec)	Yes	Yes
Door Open Pre-warn Timer (0 - 254 sec/infinite)	Yes	Yes
Door Open Alarm (Off/1 - 254 sec/infinite)	Yes	Yes
Door Forced Alarm (Off/1 - 254 sec/infinite)	Yes	Yes
Reduced power consumption	Yes	Yes
Functional tags in offline situation	1000	40
Output channels	2	11
Voltage-free relay output (Potential-free)	Yes	Yes
Open collector output (SmartSwitch II enabled)	Yes	Yes?
Free-exit input	Yes	Yes
Door sense input	Yes	Yes
Output for optional external alarm	Yes	Yes
Anti-tamper indication	Yes	Yes
User interface - 3 digit display + 3 LEDs	Yes	-
User interface - 5 LEDs	100	Yes
Hardware link to TUH (Lattice Take-up Head)	Yes	No

[★] Jumper on Slave Head selects between relay or open collector output