Cluster
CONTROLLER

- **Unrivalled simplicity:** true plug-and play modular hardware

- **On-board intelligence:** full off-line functionality

- **Integration:** operates with a host of third party products

- **Backwards compatible:** for seamless upgrading and integration

Powerful, feature rich controller

TRULY VERSATILE ACCESS CONTROLLER MODULE

This unit is the cornerstone of our Access Portal access control solution, offering you:

- Simplified installations
- Plug-and-play clustering
- Powerful offline operation
- Processing power to control up to 64 readers
- Switch between four modes of operation through the dip-switch

OTHER FEATURES:

- Anti-tamper switch
- 8 LED diagnostic indicators
- S-Bus port to connect cluster modules up to 150m away
- RS485 and TCP/IP connection options

The Access Portal cluster controller module brings an unrivalled simplicity to the installation of an access control solution.

True plug-and-play

Modular hardware means you simply plug in more units to expand your installation - making it very easy to adapt the system to suit your changing needs. The clustering concept is also highly cost effective as one cluster controller can manage up to 8 reader modules, giving you up to 16 readers from just one controller.

However, the modules don't have to be plugged together. You can connect using S-Bus which allows you to connect a module up to 150 metres from the controller – that's the length of one and a half rugby fields.

On-board intelligence

The controller enables full off-line functionality in the event of a power failure and each cluster controller can store up to 100,000 transactions.

Stand-alone system

With the flick of a dipswitch, the cluster controller can be configured as a complete stand-alone access control system. When selecting a cluster controller in Lite mode, there is no need for additional software or even a computer. The controller contains an embedded web server, and manages up to 16 doors.

World of choice

The unit is available housed either in plastic or a secure metal IPS enclosure. The cluster controller can be connected to the internet and configured through a browser to enable you to access your site through any HTML5 device, such as a smart phone, tablet or laptop.

In addition, the cluster controller comes with a variety of modules, which simply clip together, depending on your application:

- Wiegand reader module
- Antenna reader module
- S-Series reader module
- IO8 module

Specifications
CLUSTER CONTROLLER

Model name	Cluster Controller	Cluster Controller for IPS
Part number(s)	HCM 940	HCM941
Product description	Cluster controller unit without LCD	IPS Cluster controller unit
Colour	Black	Uncovered PCB board
LCD	-	-
Enrollment	-	-
Interface in Lite mode	Web based URL	Web based URL
Dimensions (d-w-h)	18.6cm x 9.9cm x 5.7cm 7.3" x 3.9" x 2.3"	8.2cm x 38cm x 31cm 3.2" x 15" x 12.2"
Approximate product weight	211 g (10.5 oz)	5.45 kg (12 lb)
Material	ABS plastic	N/A
Electrical specifications		
Input voltage	12 - 15 VDC polarity sensitive	
Power requirements at 12 VDC	140 mA current 1.7 W power	
Power input protection	Reverse polarity, over current and transient voltage protection	
System specifications		
Processor	32-bit ARM Cortex M3 operating at 180MHz	
Memory	200 KB RAM, 16 MB Flash Memory	
Other specifications		
Tag functionality	10,000	
Buffered transfers	100,000	
RTC	1 x 3 V, CR2032 Lithium cell battery. 2 yrs operating life, 5 yrs storage life	
Card compatibility		
Type	Mifare | iClass | HID H1021, H10302 and H10304 | HiTag Impro 125kHz and 13.56MHz slim tag, omega tag, quad transmitter-	
Type	PCB mounted switch	IPS mounted switch
Operating temperature	-25° to +60° C [-13° to +140° F]	
Storage temperature	-40° to +80° C [-40° to +176° F]	
Operating humidity	0 to 75% relative humidity non-condensing (at +40° C / +104° F)	
Environmental rating	IP20	
Certifications		
UL (US)	On request	
CE (EU)	✓	
SABS (RSA)	✓	
RoHS	✓	