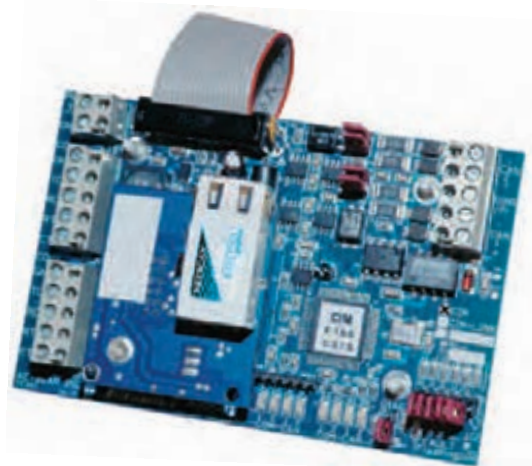


## Communication Interlink Module

### Keyscan's Next Generation Communication Control Module

- Standardized Cabling:** The Keyscan CIM establishes communication links for each control panel with CAN Bus communication protocol using one twisted pair cable for server to ACU communication and another twisted pair for global communication, all standard CAT5 cabling.
- Ground Loop Tolerance:** Keyscan's CIM maximizes electrical isolation to earth ground providing tolerance against ground loops.
- Fault Tolerance:** Unlike traditional communication devices, if one Keyscan CIM goes down due to unforeseen circumstances, it won't take the entire loop down with it. The CAN Bus communication protocol offers non-interrupted communication of remaining devices on the CAN Bus network.
- Communication Speeds:** Provides optimized communication speeds, up to 115K BPS.
- Enhanced Diagnostics:** Provides a myriad of communication diagnostics annunciated with on-board LEDs for quick and easy device-based troubleshooting.
- Auto Bit Rate Configuration:** The CIM is designed to automatically match bit rate speed with ACU configuration. This convenient feature dramatically reduces installation time.
- Network Adaptation:** The CIM is designed to support Keyscan's plug-on TCP/IP network adapter NETCOM2P/NETCOM6P (encrypted) for fast and trouble-free network based server to ACU communication.
- Ribbon Cable:** The Keyscan CIM uses a simplified ribbon cable connection to ACU for fast installation.
- Global Communication:** Utilizing the CAN Bus communication network, the CIM delivers impressive global communication capabilities that meet the demands of the most sophisticated access control implementations. Access Control Units with direct connectivity with the CAN Bus network now provide ACU to ACU communication without server dependence. This permits a host of new features and capabilities that benefit both system design and installation flexibility.



*Keyscan CIM shown with optional  
NETCOM2P or NETCOM6P (encrypted)  
network communication adapter*

#### CIM Specifications

Operating Voltage:	12 VDC	CAN Bus:	CAN Bus 1 - Server to ACU communication
Current Draw (CIM only):	150 mA		CAN Bus 2 - ACU to ACU global communication
CIM with NETCOM2P/NETCOM6P (encrypted):	290 mA	Firmware:	Minimum EPROM versions 7.40/8.20
Dimensions:	4 5/8" x 3" (11.7 cm x 7.6 cm)	Software:	System 7.0.16 recommended Vantage 8.1.15 recommended
Operating Environment:	32 F - 140 F (0 C - 60 C)		
Topology:	Linear		
Network Support:	Standard, Encrypted, Reverse IP		

## Communication Interlink Module

### BPS/CAN Bus Distance Chart

PC / ACU Bit Rate	CAN Bus 1 & 2 CAT 5 Distance*	RS-232 Serial Distance
9600 or 19,200	3280 ft (1000m)	49.2 ft (15m)
57,500	984.25 ft (300m)	26.2 ft (8m)
115,200	262.46 ft (80m)	9.84 ft (3 m)

\* Refers to the maximum recommended cabling distance between the 1st and last CIMs on any communication loop.

### Applications

ACUs communicate via Keyscan's new CIM infrastructure.

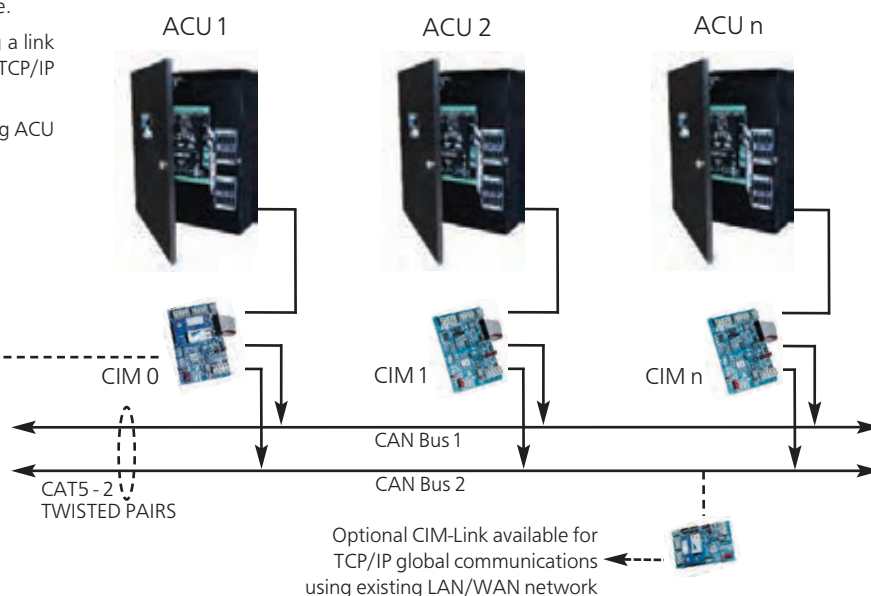
These ACUs are interlinked with CAN Bus 1 establishing a link with the Keyscan communication server via USB, Serial or TCP/IP communication options.

These ACUs are also interlinked with CAN Bus 2 delivering ACU to ACU global communication between all shown ACUs.

Direct serial communication  
using RS232 com-port  
or USB SER converter

OR

For network TCP/IP  
add NETCOM2P /  
NETCOM6P (encrypted)



### Network Communication via optional NETCOM2P / NETCOM6P

The NETCOM2P or NETCOM6P (encrypted) are modular TCP/IP converters that plug directly into the CIM module to establish network communication. The CIM module with the network connection is referred to as CIM 0 and must have a jumper on J4. Keyscan recommends that you limit your communication loop and communication software not to exceed 100 readers or 12 panels.

The NETCOM2P and NETCOM6P (encrypted) must be programmed with the Keyscan NETCOM Program Tool Utility in order to function. Refer to the NETCOM2P/CIM or NETCOM6P/CIM programming guides for full instructions.

