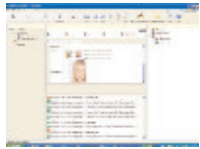# NS3 - Hardware Description Network System - 3 Relay

QTY	DESCRIPTION	
1 scanner per controller	**Fingerprint Scanner -** *(used for enrollment and authentication)* • Is an outside unit that is used for user enrollment and authentication • It should be installed in a location that is visible and easy accessible to users. • The unit is spray-waterproof, and as such the mounting location should provide adequate protection against heavy rain, snow, showers, and intense sunshine exposure. • To ensure proper operation of the fingerprint scanner, it should be installed at the proper height from the ground to the center of the rough-in box (62" for Integra scanner). • The fingerprint scanner is connected to the control unit by 4 conductors (2 data and 2 power). Please refer to the wiring diagram for more info.	
1 per system	**Control Unit** *– (used for relay control)* • Is an inside unit that is installed away in a separate location preventing tampering. • The control unit provides 3 contact closures each through normal open/close relay. • Each of the three relays is Controlled by different finger that is assigned during the enrollment process. This allows a single scanner to control all relays. Possible to name and adjust opening time. If needed and depending on the application specifics, each relay can be controlled by and have separate scanner provided the user is aware of which finger needs to swipe on which scanner. • Each relay can be connected to any electrical device or lock such as door strike, magnetic lock, garage door, etc.	
1 per system	**Power Supply –** • The system is shipped with a 9 VAC power supply. • Power is applied to the Control Unit (inside unit). • Fingerprint Scanner (outside unit) is powered by the control unit (inside unit) using 2 conductors. • If battery operation is desired, the system can operate on regulated 12 VDC. 12VDC power supply is not included.	
1 per system	**LAN/RS-485 Converter -** • The LAN/RS-485 converter functions as a serial device manager and a translator between two sides: TCP/IP and RS-485 as explained next. • On LAN side – Each converter on the network should be assigned unique static IP address Each converter is connected to the network over the LAN using RJ-45 plug where the Bio-View server application is running on a server with another static IP. You can add multiple converters per system, each will have its own static IP address. • On RS485 the converter has one port that supports RS-485 for communicating with the fingerprint scanners and control units.	
1 software license per system Software is sold separately	**Biometric Server & Administration Program –** • A window based services and user interface. • The services are installed on a server on the LAN that allows remote login over VPN or WAN if remote access is required. • The user interface allows user addition, fingerprint enrollment, access right definition, etc. • Audit trails are generated and stored at each scanner. Once it is online with the server, audit log data are reported in various options (text file or ODBC) as defined by the administrator. • There are three versions of the software: **"Light", "Communication"** and **"Business"**. See ''Biometric software'' comparison chart. http://eholovision.com/pdf/rev%20software%20specifications.pdf	