

VCL provides a comprehensive range of “Cyber Security” solutions that includes a “Cyber Smart-Rack” and “beyond the firewall” network security devices that include “Network Traffic Sniffers”, “Decoy Servers” and “Network-Kill Switches” that detect firewall breaches, network intrusions and cyber-attacks in “real-time” and assist its users to develop an advanced comprehensive defence strategy to generate an alarm and to isolate the network and / or automatically switchover to redundant network / redundant firewall in the event of a security breach.

### VCL-CSR : Cyber-Smart Rack with SMS Alerts

- Provides multiple alert and alarm options including fan management and fan failure alerts, smoke alarm, high temperature alarm, open door alarm (up to 6 binary I/Os) NTP/SNTP synchronization
- Intelligent Power Distribution Unit
- Centralized Network Management System (NMS) for monitoring multiple racks from single central location.

### VCL-5001 : Network Traffic Sniffers:

- This device detects network intrusions that could lead to Denial of Service (DoS) or Cyber-Attack.
- Flags unusual traffic flows for both inbound and outbound traffic by providing an advance warning of the Data traffic anomalies.

### VCL-5000 : 1+1 Redundant Firewalls:

- 1+1 redundant configuration firewalls, with automatic fail-over switching.

### VCL-2143 : Decoy network element

- This device can be programmed by the user to emulate (i.e. to appear to an attacker) as a Relay, IEC-61850 Protection Relay, IEC 60870-5-104 Remote Terminal Unit (RTU), MODBUS RTU, Data Storage Device, SCADA Server.
- Alerts of a network intrusion / cyber-attack in real-time. Alerts of a network intrusion or cyber-attack in real-time with an audio and visual alarm.
- Assists in identifying and isolating the source of problem /points of network vulnerability by providing intrusion or attack trace route and forensic analysis in real-time.

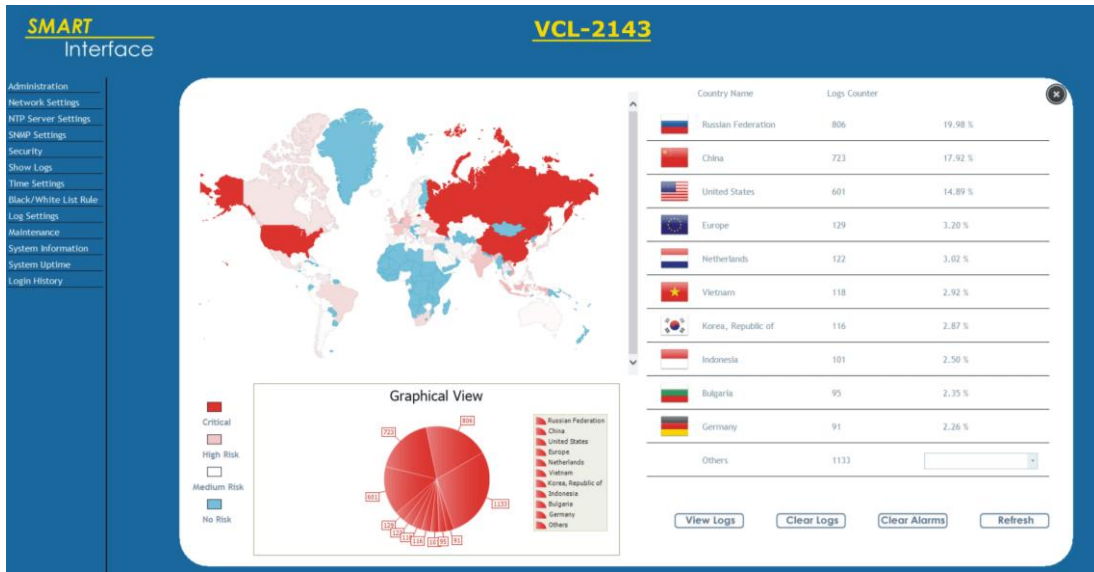
### VCL-SafeComm-E : 1+1 Ethernet Failover Protection / AB Fallback Switch:

- Provides 1+1 Automatic Ethernet Failover / AB Fallback Protection between an "active" and "standby" terminal equipment; or between “main” and “standby” networks /firewalls and routers.
- Fail-Safe. The equipment never becomes a point of failure, even in a power down condition.
- Provides equipment or network redundancy for applications which require 99.99% up-time.

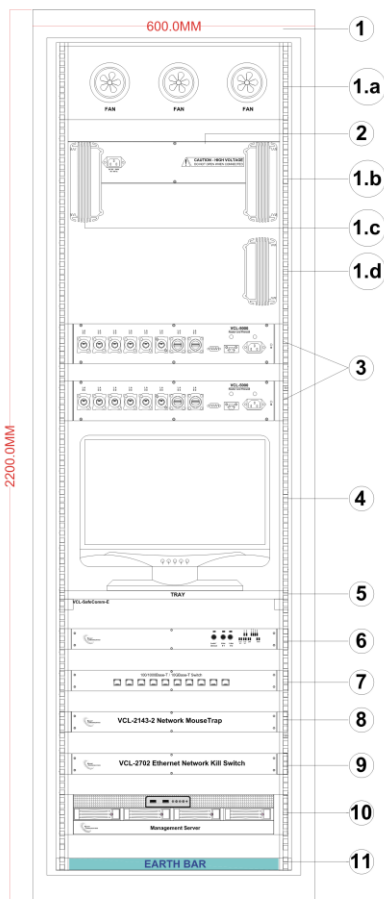
### VCL-2702 : Network Kill Switch:

- Provides manual and automatic isolation from network, in an event of a cyber-attack.
- Can be used with VCL-5001 Network Traffic Sniffer; or with VCL-2143, Decoy element to isolate the network in the event of the detection of a network intrusion / breach of the cyber-security perimeter / security zone.

**VCL-2143 : User Interface:**



**Front View of Rack:**



**Structured Network Reliability and Security Solution**

For Applications where Cyber Security and Network reliability matters

**IT No. Description**

1. Cyber Smart Rack 19" (2200 H x 600MM W x 600MM D)
- 1.a 3 FAN Unit
- 1.b VCL-2457 Smart Rack Control Unit
- 1.c VCL-3048 GPS - NTP Server
- 1.d SMS Alert Server
2. AC DC Converter (Rear View)
3. VCL-5000 - Firewall (1+1 Redundant)
4. Display Unit (Keyboard, Keyboard Stand & Mouse)
5. Base Tray
6. VCL-SafeComm - Ethernet Failover Switch
7. 100/1000Base-T / 10GBase-T Switch (Minimum 10 Ports)
8. VCL-2143-2 - Network MouseTrap - Decoy Server
9. VCL-2702 - Ethernet Network Kill Switch
10. Network Traffic Sniffer and Management Server
11. Grounding / Earth Bar