



Network Integrity Systems

1937 Tate Blvd SE
Hickory, NC 28602
Phone: 828.322.2181
Fax: 828.322.5294

info@networkintegritysystems.com
www.networkintegritysystems.com

We Bring Security To Light™

Application Note: Interceptor version 2.4 to version 2.5 firmware enhancements

Network Integrity Systems has released a significant firmware upgrade to the Interceptor™ Optical Network Security System, which includes several security and operational enhancements. This document is intended to provide a brief description of the enhancements. For detailed procedures please refer to the Interceptor Users Manual.

System Status Reporting

Changes in system health are now reported. A variety of hardware components are continuously monitored and any failure will be immediately reported through email, SMS, SNMP, rear panel Equipment Alarm relay, and through the front panel. Additionally, the Interceptor can be configured to send a daily status report via email and SMS to confirm that it is operating correctly. A quick visual check of internal health can be performed by visually inspecting the Ethernet LED. This light will exhibit a quick flash every second as an indication of internal health.

SMTP Authentication

Tight security settings on today's email servers result in unauthenticated emails getting blocked. The Interceptor now supports SMTP Authentication to improve security and interoperability with email servers. The following configuration settings have been added:

- Use SMTP Auth (yes/no)
- SMTP Auth Login
- SMTP Auth Password

Simplified Time Zones

The time zone list in the Interceptor has been simplified by switching to familiar Windows-style time zones, and a more comprehensive list of international time zones is now implemented. Interceptors that are upgraded to v2.5 are backwards compatible with pre-v2.5 time zone configurations.

Samples of v2.5 time zones:

- E. Australia Standard Time
- E. Europe Standard Time
- E. South America Standard Time
- Eastern Standard Time
- Egypt Standard Time



Network Integrity Systems

1937 Tate Blvd SE
Hickory, NC 28602
Phone: 828.322.2181
Fax: 828.322.5294

info@networkintegritysystems.com
www.networkintegritysystems.com

We Bring Security To Light™

Resumable Autoconfiguration

Autoconfiguration will now pause and automatically resume where it was interrupted as a result of an alarm received during the autoconfiguration period. Prior versions would restart autoconfiguration from the beginning following an alarm thereby delaying the start of a fully optimized monitoring profile.

Halt Alarm Timed Auto Reset Functionality

Interceptor can now be optionally configured to provide a time delay before automatically resetting from a Halt condition. In the event of a Halt alarm response, the Intrusion Relay will engage and the front panel port status indicator light will turn red as in previous versions. After a time period (user defined), Interceptor will self-initialize a port reset, identical in function to the reset caused either by console command or by pushing the front panel reset button.

The new configuration commands to support auto-reset are:

Enable Auto Alarm Reset (enable/disable)
Auto Alarm Reset Time Length (3-9999 seconds)

Optical Shutter Enable/Disable Capability

Previously for Interceptor+Plus™ and legacy "Universal" Interceptors, when an alarm caused a Halt response, the internal optical Shutter would interrupt the optical signal path concurrently with the rear panel alarm Intrusion Alarm relay engaging. Beginning with v2.5, the optical shutter action can be disabled. This enables use of Interceptor with a relay-based security system without interrupting optical traffic.

Prescan Wizard

For deployments where a lengthy auto-configuration is not convenient, the Prescan Wizard will set up default parameters in a matter of minutes. The Prescan Wizard provides 10 levels of sensitivity so that the user can quickly tune the system as desired. Auto-configuration remains the preferred method of configuring an Interceptor for a long-term deployment. A typical use case will be to use the Prescan Wizard upon installation for immediate protection, and then start an autoconfiguration to build a more tightly tuned configuration.

We Bring Security To Light™

Prescan Wizard - Select Sensitivity

	IS (dB)	SFD (dB)	UBound (dBm)	LBound (dBm)
1	0.3	2	-14	-29
2 High	0.6	3	-13	-30.78
3	0.9	4	-12	-32.56
4	1.1	5	-11	-34.33
->5 Med	1.4	6	-10	-36.11
6	1.7	7	-9	-37.89
7	2	8	-8	-39.67
8	2.2	9	-7	-41.44
9 Low	2.5	10	-6	-43.22
10	2.8	11	-5	-45
Redo Prescan				
Cancel				

Figure 1. Screenshot of Sensitivity Selection Menu

Hybrid Interceptor

Interceptor can now be ordered with a combination of Single Mode and Multimode ports in the same unit. For example, ports 1 and 2 can be SM, while 3 and 4 are 62.5µ MM. Additionally, both 62.5µ and 50µ can be mixed. This allows great flexibility where space and expense are prime factors.

Return to Default

Interceptor ports can now be returned to factory default condition. This is useful for installations that prefer or require non-adjusted values, as well as for instances where an Interceptor is moved from one location to another.

Reduced Autoconfig Selections

Although custom autoconfiguration time durations can still be entered by the user (in hours or minutes), the following common and useful "quick picks" have been added:

- 24 hours
- 1 week
- 2weeks

Backward Compatibility

The new v2.5 can be loaded in existing Interceptors without need for reconfiguring. All user information, configurations, and set-ups are automatically kept.