New! Canary Uni-Directional Data Security Diodes

Featuring:

▪ One-Way, Two-Channel Data Transmission ▪ Unauthorized Transmissions Blocked ▪

▪ Mixed RJ-45 and Duplex Fiber Input Ports to Match Host Connections ▪

▪ "We Deliver Increased Confidence and Peace of Mind to the Customer!" ▪

Canary Uni-Directional Data Security Diodes defend against a broad range of external or internal/insider cyber threats that can escape common security applications to reveal or corrupt sensitive data and make mission-critical information services non-available**.**

Protect secure servers and sensitive data from compromise. Place Data Security Diodes in environments where un-restricted two-way, bi-directional communications increase the risk of penetration, malicious attack and data loss.

Application 1: Data Security Diodes with *Dual* input/output channels, forward information originating from two *un-secured* open sources, to a pair of restricted, High-Security Host destinations using two Fiber-optic links. They simultaneously partition each data path to completely block sensitive data from being transmitted in the reverse direction.

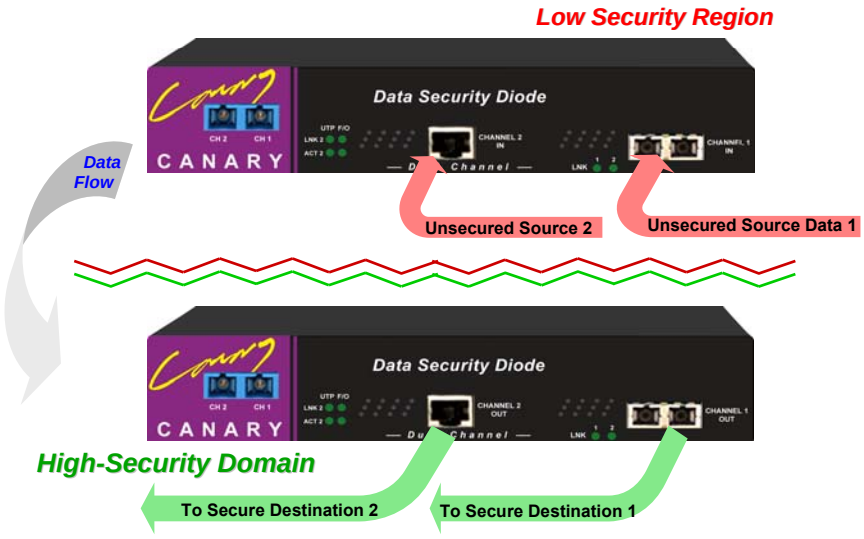
Application 2: Position a set of Data Security Diodes to *selectively forward* authorized data originating from two trusted High-Security sources, over a partitioned Fiber link, to a pair of unprotected *insecure* destinations.

Security Diodes partition their data paths to *shield* secure sources from hidden Trojans, and other intrusion attempts, preventing the unintended corruption, release or exposure of sensitive information. (*Application 2*.)

Local Diode/Host UTP & Fiber connections are nominally full duplex. However, bi-directional traffic is never transmitted between linked Data Diodes. Data handling functions including IP acknowledgement, Flow-Control and error correction are completely disabled and no internal or external means are available to restore inter-Diode bi-directional capability.

As another defensive layer for your critical data, Canary Data Security Diodes "*Deliver increased confidence and peace of mind!"*

CF-21UTD/ 21UTR & GF-55UTD/ 55UTR Dual-Channel Data Diodes



Application 1.

▪ *Plug-and-Go UTP & Fiber Connections:*

Configure your applications to run via UDP. Connect (2) *un-secure* devices to *CF-21UTD* or *GF-55UTD* transmit-only *Data Security Diodes* that forward the traffic to remote, receive-only *CF-21UTR* or *GF-55UTR* Diodes. The receive-only Diodes copy the traffic to a pair of secure Destination Hosts. (*Application 1*). Reverse configuration for *Application 2*.

▪ *Flexible, Secure Network/Host Configurations:*

Low to High: Forward information to a Higher Security environment while blocking the un-authorized release of sensitive data in the reverse direction,

High to Low: Restrict authorized user access. Maintain System and Data Security, Integrity and Availability while allowing the limited export of selective information to lower security-level destinations.

▪ *Hardwired Immunity from External Software threats:*

Canary *Data Security Diodes* execute their key functions in hardware. With tamper-resistant cases, there is no vulnerable, software, firmware, memory or buffers that can be exploited to attack and surreptitiously alter or disable Uni-directional operation.

Using UDP or similar protocol over a point-to-point link eliminates the need for normal transmission acknowledgments.

Control physical access to your Canary Data Security Diodes and safely deliver critical data where needed – *Easy, Secure, Information Availability!*

Canary Communications

Main Features:

Interfaces – Inter-Diode Links & Local Connections:

- CF-21UTD: (Two) Simplex SC (m/m) Fiber ports: ***Tx*** only, 100BASE-FX *
  (2) *Local* Source-Host ports: multi-mode SC Fiber & RJ-45
  CF-21UTR: (2) Simplex SC Fiber ports: ***Rx*** only, plus *Local* Fiber & RJ-45
- CF-91UTD: Same as CF-21UTD above, with SC (s/m) Fiber ports *
  CF-91UTR: Same as CF-21UTR above, with SC (s/m) Fiber ports
  [21 ~ SC-type m/m Fiber connector, 22 ~ ST-type; 91 ~ SC s/m type]
- GF-55UTD: (Two) Simplex SC Fiber ports: ***Tx*** only, 1000BASE-SX *
  (2) *Local* Source-Host ports: multi-mode SC Fiber & RJ-45
  GF-55UTR:(2) Simplex SC Fiber ports: ***Rx*** only, plus *Local* Fiber & RJ-45
- GF-31UTD: Same as GT-55UTD above, with SC/LX (s/m) Fiber ports *
  GF-31UTR: Same as GT-55UTR above, with SC/LX (s/m) Fiber ports
  [X = 55 ~ multi-mode, SC-type and X = 31 ~ single-mode, SC-type]

Other versions change modes, utilize CWDM or long-reach multiplexed optics for *inter-diode links* between *Transmit-only* and *Receive-only* units.

Please contact Canary for technical details on additional models.

Networking – Local User Connections:

- 100BASE-TX & 1000BASE-T: Auto-negotiation and Auto-crossover enable half/full duplex Ethernet Diode Links with *local* Source and separately, *remote* Destination equipment.
- 100BASE-FX & 1000BASE-SX/LX: Handshaking to auto-configure *local* full duplex links with Source equipment.

* 100 & 1000 Mbps Ethernet *Inter-Diode Links* do not forward full duplex bi-directional traffic. UDP Destination Address, Port Number & Checksum can be enabled by application *

Management:

- No management reporting or access to internal functions
- No provision for error handling/reporting

Mechanical & Environmental:

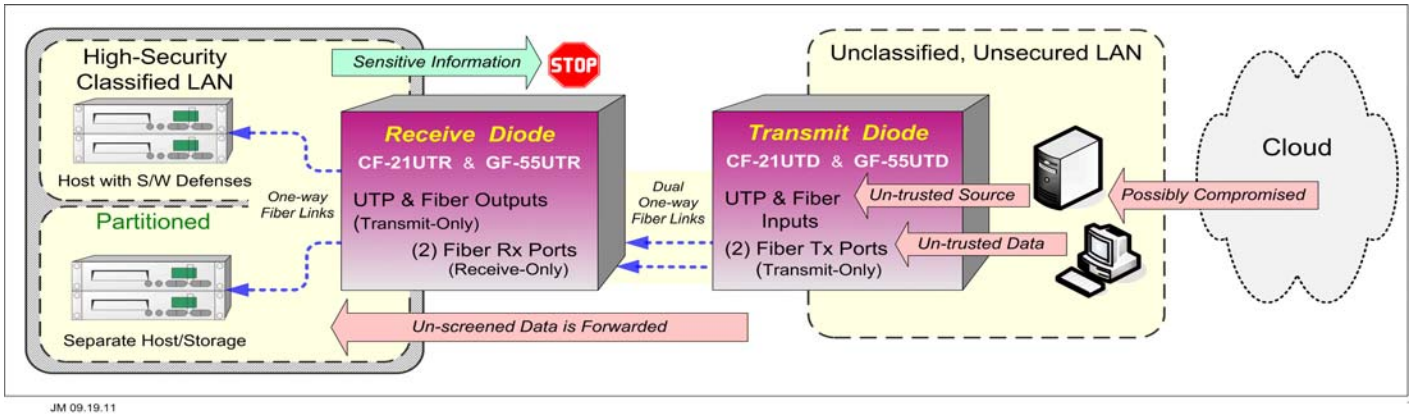
- Inside, Desktop locations or 19" rack-enclosures
- Two units can be mounted side-by-side on a standard 19"-wide shelf (available from Canary)

FCC Class A CE Approval

Specifications:

Standards:	IEEE 802.3u	100BASE-TX, 100BASE-FX
	IEEE 802.3ab,z	1000BASE-T, 1000BASE-X
	IEEE 802.1d	Spanning Tree: None
	IEEE 802.1q	VLAN: Limited Functionality
	IEEE 802.3x	Flow Control Not Supported
Throughput:	CF-21UTD: 100 Mbps (One-way transmission Max.) GF-55UTD: 1000 Mbps (One-way transmission Max.) * (See Note above/right column) *	
Maximum Distances:	RJ-45/UTP:	100 meters
	Fiber Optic:	100 Mb: 2 Km, 20, 40, 60, 80 Km 1000 Mb: 500 m, 10, 20, 30, 60 Km

Power:	100 ~ 240 VAC Auto-ranging wall-mount; 9 - 48 VDC input plus Terminal Block option
Temperature:	Operating: 0º C to 50º C Storage: -20º C to 70º C
Humidity:	Operating: 10% to 80% RH Storage: 5% to 90% RH
Emissions:	CE Mark EN60950 & EN55022 and FCC Part 15 of Class A
Safety:	US 21 CFR (J) & EN 60825-1 standards and UL 1950 applications, EN 60950, CE, TUV
Dimensions:	5.21 in. x 8.43 in. x 1.64 in. (D x W x H) [12.7 cm x 20.3 cm x 4.4 cm] (D x W x H)
Weight:	5.5 lb. (2.5 Kg) (shipping wt.)



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