

New! Canary Uni-Directional Data Security Diodes

Featuring:

- **One-Way Data Transmission** ▪ **Unauthorized Transmissions Blocked** ▪
- **RJ-45 Auto-Negotiation and Auto-Cross for Simple 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: Canary 100 Megabit **CT-20SD** and Gigabit **GT-10SD** Data Security Diodes forward information originating from an *un-secured* open source to a restricted High-Security destination. They simultaneously partition the data path to stop all return-path transmissions and completely block the reverse transmission of sensitive information.

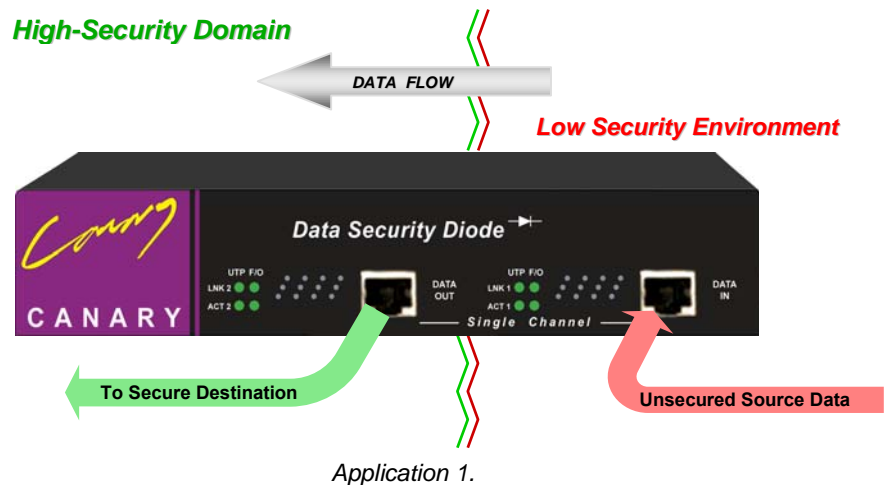
Application 2: Position a Canary Data Security Diode to *selectively forward* authorized data originating from a secured, trusted source to a weakly protected, *insecure* destination.

The partitioned data path *shields the* Secure Source from hidden viruses, Trojans, malicious programs or other intrusion attempts and prevents the corruption or unintended release of critical data, or its loss and non-availability.

Local Diode/Host UTP connections are nominally full duplex. However, bi-directional full duplex traffic is never internally transmitted between Data Diode input and output ports. 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 offer Canary Data Security Diodes "Deliver increased confidence and peace of mind!"

CT-20SD & GT-10SD – UTP to UTP Single-Point Diodes



▪ Plug-and-Go UTP Connections:

Configure your application to run via UDP. Connect the *un-secure* device to the **CT-20SD** or **GT-10SD** Security Diode "Data-In" port; then simply connect the *Security Diode* "Data-Out" port to the Secure Domain Host for protected, one-way data transmission (*Application 1*). Reverse the connection scheme 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 **CT-20SD** or **GT-10SD** 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 their cable connections to thwart unauthorized access and safely deliver critical data where needed – *Easy, Secure, Information Availability!*

Canary Communications

Main Features:

Interfaces – Local Connections:

- CT-20SD: Two 100BASE-TX (RJ-45) Ports *
- GT-10SD: Two 1000BASE-T (RJ-45) Ports *
- * (plus Internal Fiber Optic Link between physically isolated PCBs)

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, with remote Destination equipment.

Management;

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

Mechanical & Environmental:

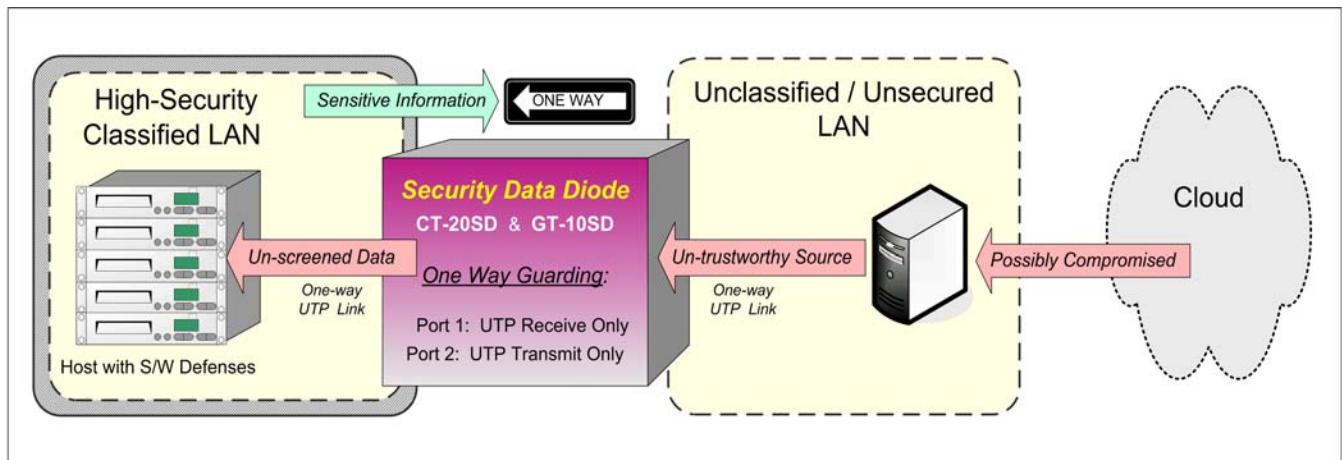
- Inside, Desktop locations or 19" rack-enclosures
- Two units can be mounted side-by-side on a standard 19"-wide shelf (available from Canary)

Please contact Canary for technical details on additional models.



Specifications:

Standards:	IEEE 802.3u	100BASE-TX *	Power:	100 ~ 240 VAC Auto-ranging wall-mount; 9 - 48 VDC input plus Terminal Block option
	IEEE 802.3ab	1000BASE-T *	Temperature:	Operating: 0° C to 50° C Storage: -20° C to 70° C
	IEEE 802.1d	Spanning Tree: None	Humidity:	Operating: 10% to 80% RH Storage: 5% to 90% RH
	IEEE 802.1q	VLAN: Limited Functionality	Emissions:	FCC Part 15 of Class B & CE: Pending
	IEEE 802.3x	Flow Control Not Supported	Safety:	US 21 CFR (J) & EN 60825-1 standards and UL 1950 applications, EN 60950: Pending
Throughput:	100 Mbps (One-way transmission Max.) or; 1000 Mbps (One-way transmission Max.)		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)
Max Distances:	RJ-45/UTP : 100 meters		Weight:	5.5 lb. (2.5 Kg) (shipping wt.)
	* See Data Rates Note above *			



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Preliminary Specifications

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Canary Communications is an
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