

ReCon 2U

Secure Bidirectional Communications



SECURE BIDIRECTIONAL DATA DIODE COMMUNICATIONS

Possible use case scenarios:

- Communication between client and server
- Remote access
- Remote command and control
- Remote monitoring
- Safety system isolation
- No direct pass through of TCP/IP traffic

BIDIRECTIONAL HARDWARE ADVANTAGE

ReCon 2U is a hardware-based cybersecurity solution utilizing two independent data diodes. Housed within a 2U rackmountable enclosure, each one-way path within ReCon 2U is completely independent from the other. The separate paths each enable only one direction (send or receive) of the data transfer, together creating a complete Bidirectional pathway in one device.



Digital transformation creates both opportunity and risk for today's data-driven organizations who are challenged with navigating the convergence of OT and IT systems, the emergence of the IoT and IIoT, and limiting or reducing the attack surfaces of their networks. As the evolution of this digital transformation unfolds and more networks and devices are connected, security concerns will only continue to grow.

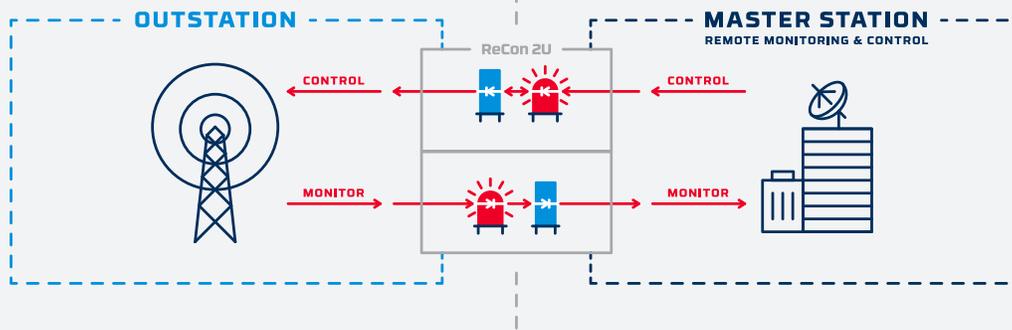
To address this pressing need for security, hardware-enforced data diodes have been proven time and again to protect the OT networks, however, in some cases, organizations need to secure bidirectional communications that cannot be one-way.

The ReCon 2U solution was designed to combine the same proven security benefits of a one-way, hardware-enforced data diode cybersecurity solution with the ability to provide secure round trip, bidirectional communication. ReCon 2U enables organizations to maintain secure two-way connections between networks, while reducing their attack surface with much higher security assurance than traditional firewalls.

Defense-in-Depth security at multiple capacities

ReCon 2U follows the Department of Homeland Security's (DHS) guidance for securing applications that cannot be one-way and is housed in a 2U rack-mountable enclosure.

- Fixed destination IP address
 - + Ensures that communication can only be directed to a single destination IP address
- Secure remote command and control
 - + Enables secure remote command and control with less risk than firewall-based security
- Restricted session initiation
 - + TCP/IP connection can only be initiated from the trusted source side network. Destination side cannot initiate communication into the device.



Technical Specifications

PROTOCOL SUPPORT

ReCon 2U provides basic protocol support for secure Bidirectional communication:

- FTPS
- TCP/IP
- DNP3
- Ethernet/IP
- IEC-104
- ICCP
- MS SQL Database Replication

ADMINISTRATIVE SUPPORT

- Separate administration for source and destination sides
- Supports up to 5 simultaneous data streams
- Port mapping allows the admin to control destination address for connection - no entity outside of the destination network can access information about that network. This prevents malicious users from using a port scanner to find vulnerabilities in the network.
- Menu-driven user interface
 - + Restricts command line access

OPERATING CONDITIONS:

- 32°F to +110°F
- 0°C to +43.33°C
- 5% to 90% humidity non-condensing

POWER SUPPLY:

- Input: 75-230 VAC,
- Estimated Normal operating Usage 10-16 W/side
- Max. 20W per side

STORAGE:

- -40°F to 158°F
- -40°C to 70°C
- 5% to 90% humidity non-condensing

VIBRATION:

- Vibration: (IEC 60255-21-1)
- Vibration 1g(10-500Hz) (Operational)
- Vibration 2g(10-500Hz) (Operational and Non-Operational)

CHASSIS:

- Black Anodized aluminum with Locking Top

MOUNTING SYSTEM:

- (1U) Rack Mount, tabletop

NETWORK CONNECTIVITY:

- 1000 base-T copper
- Separate Ethernet connections for network traffic and remote administration
- Physical connectors: 8P8C (RJ45)

COOLING SYSTEM:

- Conductive cooling through enclosure side walls with High Life Expectancy/Low Noise Fans

SHOCK:

- Shock: (IEC 60255-21-2)
- Shock 10g 11ms (Operational)
- Shock 30g 11ms (Operational and Non-Operational)

APPROVALS:

- FCC Class A compliance
 - CE Mark
 - CB Certificate: DE 2-034658
 - EN 62368-1:2014/AC:2015
- International Common Criteria Certification - EAL4+ Certified
- VCCI



ISO:

- Manufactured using ISO9001:2015 certified quality program

CHASSIS SIZE:

- 16.5" W x 1.75" H x 13" D
- 41.91 cm x 4.5 cm x 33 cm

UNIT WEIGHT:

- 7.92 lbs./3.6 kg.

MEAN TIME BETWEEN FAILURE (MTBF):

- 11+ years

LOCAL ADMINISTRATION:

- VGA connector for monitor
- USB connectors for keyboard and mouse

OWL Cyber Defense

Owl Cyber Defense Solutions, LLC leads the world in data diode and cross domain network cybersecurity. With a constant focus on customers in the military, government, critical infrastructure, and commercial communities, Owl develops market-first, one-way data transfer products to meet a variety of operational needs, from entry level to enterprise.

For more information on Owl, or to schedule a demo, visit www.owlcyberdefense.com