METADEFENDER™

Bilateral Security Gateway

For Safe OT/IT Communication

MetaDefender Bilateral Security Gateway (BSG) supports real-time replication and transfer of historians and SQL databases without compromising the security and integrity of your critical production systems. BSG strictly enforces one-way data flows. It also employs a proprietary bilateral mechanism to handle data replies needed by SQL databases and industrial historians hosted in your OT environment, which is completely transparent and requires no change to application configurations or work procedures.

Benefits

- Lossless OT to IT data communications
- Includes a unique mechanism to permit receiving data replies for select applications
- Isolates OT/ICS assets against cyberattacks
- Assures reliable database replication with no database synchronization issues.
- Segments and protects networks, devices, historians, SCADA, DCS, HMIs, and PLCs

Key Features

Guaranteed Payload Delivery
Aboslutely no data loss.

Anti-Overrun Control
Eliminate data overflow, retransmissions, and sync issues.

No Return Path
One-way data flows are enforced by a non-networked serial connection between the BSG server pair.

Bilateral Support
A mechanism permits data replies while enforcing full protocol break and physical isolation.

Easy to Deploy
The preconfigured platform deploys quickly and seamlessly.

Simple to Operate
Ready for use in minutes after one-time initial setup with no firewall audit or configuration needed.

Scalable
Choose 100 Mbps, 1 Gbps, or 10 Gbps throughput.

METADEFENDER
BILATERAL SECURITY GATEWAY

Use MetaDefender Bilateral Security Gateway for OT data replication with secure response

Electrical

Redundant Power Supply	250W
Voltage	100-240VAC, auto ranging
Power Consumption	150W typical

Hardware

Dimensions	2x 19 x 1.75 x 15.75" (483 x 44 x 400mm)
Weight	2x 27lb (12.2kg)
Operating Temp	32 – 131°F (0 – 55°C)
MTBF	>50,000 hours
Mounting	1U rack kit included

Other Specifications

Connectivity	2x USB for connecting provided crypto keys
Tested Latency[1]	0.6ms TCP, 0.7ms UDP

1. Actual latency results may vary according to setup used, traffic characteristics, and network topology.

Protocol & Certification

Industrial	Modbus OPC (UA, DA, A&E) MQTT IEC104 ICCP
Industrial Historian	GE Proficy Aspentech IP21 AVEVA PI CanaryLab Other historians
IT	UDP, TCP, HTTP, HTTPS, SMTP Video/audio stream transfer
IT Monitoring	Log Transfer SNMP Traps SYSLOG SIEM integration via SYSLOG GE OSM Screen view
Relational Database	Microsoft SQL Oracle Golden Gate Other relational databases
File System	FTP, FTPS, SFTP Folder and file transfer/copy Windows File Share SMB, CIFS Antivirus updates Patch (WSUS) updates
Certification	FCC/CE/UKCA

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