OPSWAT.

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

We offer a 100Mbps base platform that can be field upgraded to 1Gbps. Additionally, we offer an option for 10Gbps delivered on enterprise servers.



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	
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 Ethernet packet 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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Protecting the World's Critical Infrastructure