Network Security Solutions

AG000-012 1G Network Switch Data sheet
V1.0

Air Gap 1G Network Switch - Data Sheet

The Air Gap 1G Network Switch is a 1GBase T Ethernet layer 1, 1 input 7 output 19 inch rack mounted/desk top mounted air gap isolation unit for the automation of users backup process with the following features

8 Ethernet interfaces, 1 input (common),7 ports (air gap)
1 Ethernet management port
4 USB ports (Mouse, Keyboard)
1 HDMI port
Configuration and operational state displayed on front and rear of unit
Fanless operation
Operational temperature range 0 to 40 C
1U 19 inch rack mounted with mounting lugs
Size 444 mm (Width), 44 mm (Height), 221 mm (Depth)
100 V to 230 V AC 50 and 60 Hz
Integrated power supply
Fully CE/UKCA approved
Easily installable, simple to use and secure
Ideal for Small Offices/ Home Office (SOHO)
LED indicators for ease of use
Energy efficient technology providing power savings
MDI/MDIX on each port to eliminate crossover cables.
Auto-negotiation to automatically connect at the highest speed.
No blocking switching architecture to allow maximum throughput at wire speed
802.1p QoS for traffic/frame prioritisation
Plug and Play

Front panel of Air Gap 1G Network Switch

Back panel of Air Gap 1G Network Switch

The Air Gap 1G Network Switch is designed to fragment and isolate computer devices within a network when not being used rendering them impervious to hacking or other malicious attacks.

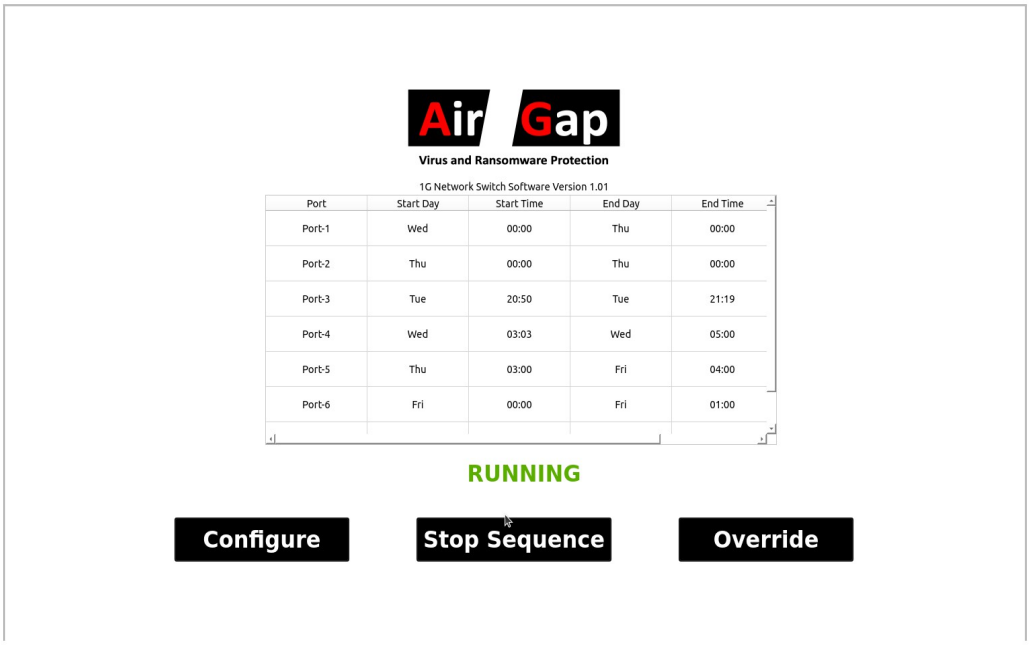
The Network Switch allows computers to be disconnected from a network when the data on it is not being used – allowing the implementation of a clear desk policy for computer networks as recommended by NCSC

The Air Gap 1G Network Switch is connected within a computer network as easily as any other network switch is connected. Once configured the Air Gap Network Switch disconnects computer devices such as network drives or other hardware which has significant data on it when it is not required. The Air Gap Network Switch can provide network protection for up to 7 computer devices.

The USB and HDMI connections allow connection to a monitor, mouse and keyboard.

The front panel and rear panel LEDs allow easy understanding of the state of the Air Gap 1G Network Switch.

The Air Gap Network Switch sequence is configured via a simple graphical user interface (GUI). For further details see 1G Air Gap Network Switch User Guide.



Air Gap 1G Network Switch GUI Main Screen

For further details of air gap switches and how they provide the ultimate in network security please see “Air gaps – what are they and why they are used”.

Specifications

Front Panel			
Indicators			
Power	1 off	Green	
Running/Stopped	1 off	Green/Red	
Port Status	7 off	Yellow/Green	
Rear Panel			
HDMI	1 off	HDMI Full Size Female	
Video Format	1080 *1920 Output		
USB	2 off	USB 2.0 Socket Type A	
	2 off	USB 3.0 Socket TypeA	
Management Port	1 off	1G BaseT Ethernet	10/100/1000 Mbits/sec
Common Port	1 off	1G BaseT Ethernet	10/100/1000 Mbits/sec
Air gapped Ports	7 off	1G Base T Ethernet	10/100/1000 Mbits/sec

Data Ports	
IEEE Network protocols	
IEEE 802.3ab	1000Base-T Gigabit Ethernet
IEEE 802.3u	100Base-TX Fast Ethernet
IEEE 803.3i	10Base-T Ethernet
IEEE 802.3x	Flow Control
IEEE 802.1p	Priority QoS and DSCP
IEEE 802.3	CSMA/CD
IEEE 802.3az	Energy Efficient Ethernet

Features
Auto MDI/MDI-X Cable Detection
Auto-Sensing Half Duplex Switched Ports
Auto Power Saving
Energy Efficient Ethernet
Short Cable Detection

Performance Specifications	
Bandwidth non blocking	2 Gbps
Packet Buffer Memory	192KBytes
Jumbo Frame support	9216 Bytes
Forwarding Rate	1,448,000pps
Latency	<2.6 us

Power			
Connector Type	1 off IEC type 3		
Parameter	Min	Max	
Voltage (V)	85	264	
Frequency (Hz)	47	63	
Input Current (A)		0.25	(115 V)
Input Current (A)		0.125	(230 V)
Earth Leakage current (mA)		0.75	(230 V, 50 Hz)
Inrush current (A)	30		(115 V at 25 C)

	50	(230 V at 25 C)
Fuses	2 off 1A T1A	

Environmental	Min	Max
Storage Temperature (C)	-10	70
Operating Temperature (C)	0	40

Regulatory

EMC Emissions

Type	Standard	Test Level
Conducted	EN55032	Class B
Radiated	EN55032	Class B
Harmonic Current	EN61000-3-2	Class A

EMC Immunity

Type	Standard	Test Level	Criteria
ESD Immunity	EN61000-4-2	3	A
Rated Immunity	EN61000-4-3	3	A
EFT	EN61000-4-4	3	A
Surge	EN61000-4-5	Installation Class 4	A
Conducted	EN61000-4-6	3	A
Dips	EN61000-4-11	Dip 100% (0VAC), 10 ms	A
	EN61000-4-11	Dip 100% (0VAC), 20 ms	A
	EN61000-4-11	Dip 60% (88VAC), 200 ms	A
	EN61000-4-11	Dip 30% (154VAC), 500 ms	A
	EN61000-4-11	Dip 20% (176VAC), 5 s	A
Interrupt	EN61000-4-11	Int 100% (0VAC), 5 s	B

UL	UL62368-1
TUV	EN62368-1, EN60335, EN61558
CE	All applicable directives
UKCA	All applicable directives