

Ultra-Secure Endpoint Manager (US-EPM)

Protecting hundreds of thousands of IoT and IIoT devices over the Internet with quantum derived cryptographic technology and incloneable quantum key generator.



Figure 1 - Blueskytec US-EPM (6-module variant)

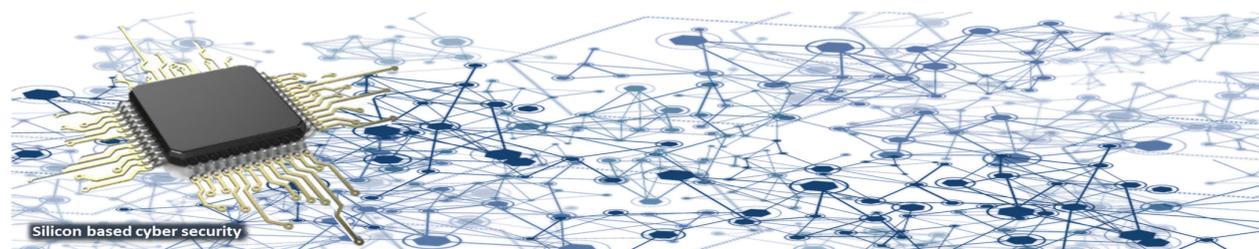
Blueskytec are specialists in securing IoT, industrial IoT, control systems and infrastructure that provide a range of products that secure cyber-physical systems: the interface between the Internet and real-world devices. Systems are at the heart of national infrastructure and smart cities.

The quantum-derived cryptographic technology that Blueskytec has developed securely partitions endpoint devices into separate key domains: keyspaces. A typical configuration would be one hundred thousand devices clustered in one hundred key multi-domain spaces that allow multi-user and multi-level security through Internet, WiFi, GSM or satellite communications domains.

The unprecedented levels of performance and security that are achieved by implementing in electronic hardware rather than software and by using symmetric encryption and pre-placed single-use pads (OTP) that cryptography masters consider more secure, even resistant to quantum computing attacks.

For the first time, security that was once only available in military systems is available not only between discrete IoT devices, but is now available at scale over the Internet.

For maximum scalability, each US-EPM can be configured with up to six modules and even more endpoints can be accommodated simply by employing additional US-EPM that securely connect millions of endpoints and cloud services and allow management to be centralized to securely reconfigure endpoints selectively.



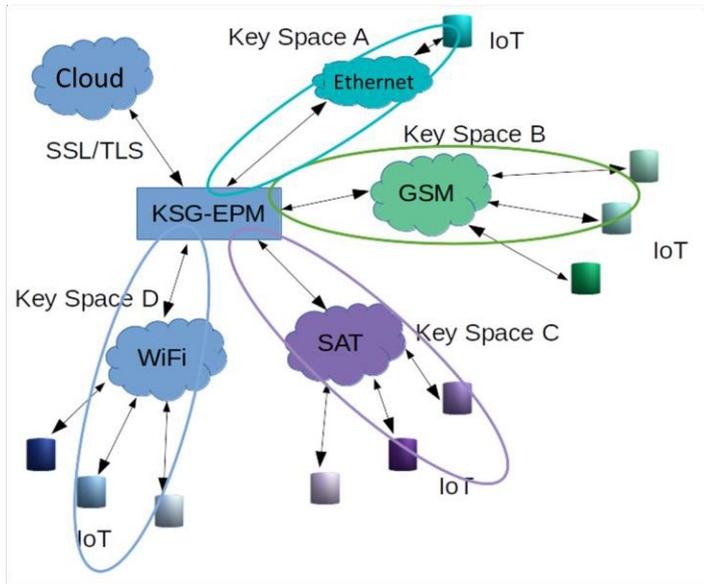


Figure 2 - Blueskytec Ultra Secure Ecosystem

Installation configurations can be 1:1 (a keyspace manager connected to a cloud interface) or N:1 (a cloud interface (10GigE) connected to many endpoint administrators). A 4:1 configuration is optimal when four GigE inputs are connected to a 10GigE output (the standard configuration supplied).

For maximum flexibility, 1:1 GigE interfaces are used with external switches used to add the interface to the cloud. Cloud accesses can use TLS/SSL with ECC384 PKI or AES256 symmetric algorithms.

Each US-EPM can be configured with between 1 and 6 modules, each module comprises:

- 1 x 10/100 management interface Ethernet port
- 1 x 4G LTE/NB - 5G upgrade also available
- 4 x RS422 interface
- 2 x RS485 interface
- 2 x CAN interface
- 2 x RS232 interface
- 8 x GigE 0 2 x 10GigE optical module
- Each additional module provides 8 x GigE Optical Module 0 2 x 10GigE

United States - EPM Module configurations:	10/100	GigE/10GigE	Total
Master US-EPM	1	8/2	(8 or 2)
US-EPM Module 1		8/2	16 or (8 + 2)
US-EPM Module 2		8/2	24 or (16 + 2) or (8 + 4)
US-EPM Module 3		8/2	32 or (24 + 2) or (16 + 4) or (8 + 6)
US-EPM Module 4		8/2	40 or (32 + 2) or (24 + 4) or (16 + 6) or (8 + 8)
US-EPM Module 5		8/2	48 or (40 + 2) or (32 + 4) or (24 + 6) or (16 + 8) or (8 + 10)

Dimensions: 1U high rack mount 19" (H43 x D430 x W430 mm), Weight 3.3kg

Power: AC input voltage 110 to 240 VAC, Frequency 50 to 60Hz, 250 Watt

Non-operating environment: Temperature: -40 to 70°C. Humidity 5 to 95% (non-condensing)

Operating environment: Office environment: Temperature 10 to 50°C. Humidity 5 to 95% (non-condensing). Industrial - IP67, Military Mil-Spec 810 & Space Mil-Spec 883 available on request.

