

THAMER (TECHNICAL SPECIFICATION)

APPROVALS

Meets all CESG High Grade Approvals and relevant EC Standard Statutory Instruments. THAMER is SECAN approved for NATO use.

Conforms to the following EC Directives:

- > Council Directive 89/336/EEC as amended by 92/31/EEC and 93/6B/EEC implemented by Statutory Instruments En55022 Class B (1998) EMC Emissions, EN50082-1 (1998) and EN55024 (1998) EMC Immunity Standards
- > Council Directive 73/23/EEC as amended by 93/6B/EEC implemented by Statutory Instrument 1994 No. 3260 Consumer Protection Electrical Equipment (Safety) Regulations 1994
- > Council Directive 91/263/EEC implemented by Statutory Instrument 1994 No. 3129 Telecommunications Terminal Equipment Regulations 1994
- > Council Directive implemented by European Standards EN61000-3-2 (1995) EMC Mains Harmonics Current Emissions (Power factor correction) and EN61000-3-3 (1995) EMC Mains Fluctuations and Flicker in Low Voltage equipment
- > Council Directive implemented by European Standards EN60950 Low Voltage Directive (Safety)

Characteristics

Equipment Type	Full duplex, point-to-point, synchronous, high grade data crypto
Security	Designed for classified traffic up to and including Top Secret
Key Management	Fully automatic key generation using PKC
Asymmetric Clock Speeds	(dependent on LIM fitted)
Automatic Key Variable update	Once every 4 to 7 days in optimum conditions
Plug-in LIMs	To provide a variety of interfaces to DTE and DCE, including RS-232,V11 and G703
Data Rates	Between 1.2 kb/s and 2.048 Mb/s (dependent on LIM fitted)
Single Bit CTAK mode	1.2 kb/s to 340 kb/s (fixed error extension)
Variable Block CTAK mode	(Default) at 1.2 kb/s to 2.048 Mb/s (mean error extension)
Enhanced User Interface	(if required) not required for 'normal' operation
Error Tolerance	Designed for use in BER of better than 1×10^{-6}
Latency	Approx. 7 bits (dependent on LIM)
Power Consumption	(dependent on LIM fitted)
	Max 20 W dc input, 40 W AC
	Typical (V11 LIMs) 10 W dc input, 25 W AC
Size THAMER Unit	Width 160mm
	Depth 230mm
	Height 40mm
Pod PSU	Width 80mm
	Depth 165mm
	Height 50 mm
	(including feet)

Weight	THAMER Unit	<1kg
	Pod PSU	<1kg
Environment	To ETS 300 019 (Environmental conditions and environmental tests for telecommunications equipment)	
	Parts 1-0, 2-0, 2-1, 2-2, 2-3, May 1994 & 2-3A2 May 1998	
Reliability	> 20,000 hours (THAMER Unit)	

Interfaces

The THAMER unit connects to the outside world via two plug in modules, one on the red side and the other on the black side of the unit. Various interface modules are available including RS-232,V11 and G703, allowing the user to select the exact configuration required without the expense of additional unwanted options. Each module is colour coded and provided with an indicator bar which, when attached to the front panel of the THAMER, provides a visual indication of the configuration. This facility is particularly useful when multiple THAMERs are mounted in a 19" rack.

