

GRETACODER® 650

High-Speed Link Encryptor



The GRETACODER 650 is a 19" rack mounting encryptor providing full-duplex synchronous link encryption with data rates of 34 and 45 Mbps (E3 and T3). It works either in a protocol-transparent mode (continuous encryption) or in a protocol-dependent operating mode (framed).

True 128 bit key size

Data rate: 34/45 Mbps

Interface supports E3 and T3

Fully automatic self-synchronization

Sophisticated, built-in key management

Supports industry standard SNMP control

GDS

GRETACODER Data Systems AG

Technical Data

Data rates (encrypted)	synchronous, full duplex	34 / 45 Mbps
Self-synchronizing	After power-down, bit errors and bit slips	fully automatic
Self-test	After power-up, on user command	integrated
Streamcipher algorithm	Key size Period Recursion length (complexity)	128 bit 10^{90} 10^{50}
Key management (Built-in to each GC 650)	Master Key establishment: Keygun Automatic secure session key changes GC 650 supports operation without NSC	• (key timer) •
Network Security Center (NSC) (optional)	Supports central key management and Automatic Key Negotiation	• •
Line Interface (DTE & DCE)	G.703/G.751/G.753 (E3) and G.703/G.752 (T3) V.x.(V.11/X.21) on request (instead of G.703.)	unframed / framed up to 8.448Mbps
Control Interface for central Network Management	Ethernet (IEEE 802.3) MIB II and Enterprise MIB	10Base-T SNMPv1
Line voltage	Auto-range	85 to 264 VAC
Line frequency		47 to 440 Hz
Power consumption		20 VA
Temperature range	Operating	0 to +50 °C
	Storage	-25 to +70 °C
Weight	Rack mount device	4 kg
	Cover for desk-top operation available	optional
Dimensions	w/h/d (mm), maximum	483/44/340

The GRETACODER 650 is a high performance encryption unit for 34/45 Mbps E3/T3 channels. It features leading edge technology and is built according to advanced ISO 9001 quality standards. The security architecture enables secure initial rollout and installation and automatic, unattended operation thereafter. Its communication circuits are designed for maximum throughput, minimal delay and robust recovery from channel problems. The unit is fully self-synchronizing after sync-loss, bit errors, bit-slips and line drop-outs. Cryptography is based on a Master Key / Session Key concept and the use of special Security Modules for safe key storage. Protection against some specific attacks is provided by the built-in rejection of any repeated use of a Session Key. The 19" rack mount device is typically being used on high-speed leased lines in multi-protocol networks. For the protocol-dependent (framed) operation mode, customized implementations are available on request. The built-in SNMP functionality provides industry standard control and monitoring capabilities similar to other network devices (e.g. Routers).

SNMP Functionality GC 650 (Summary)	
Remote Device Monitoring	Monitors general device information Monitors interface status and parameters
Fault Management / Alarms	Generates traps when alarm conditions occur

The GRETACODER 650 complies with international standards in regard to safety, emission, etc.
GRETACODER Data Systems AG reserves the right to change specifications without notice.
GRETACODER® is a registered trademark of GRETACODER Data Systems AG.

GRETACODER Data Systems AG (GDS)

Althardstrasse 150, CH-8105 Regensdorf, Switzerland

Phone +41-(0)1-871-1111, Fax +41-(0)1-871-1100, E-mail mailgds@gds.ch, Internet <http://www.gds.ch>