

# FACSIMILE ENCRYPTOR Omnisec 525



The Facsimile Encryptor Omnisec 525 exemplifies Omnisec as the world's leading supplier of maximum-security, high-quality (ISO 9001 approved) communication solutions.

Communication security is based on Omnisec's security architecture **OmniCrypt™**: unique, short-lived bilateral Session Keys are generated from secret, long-lived Master Keys stored in removable **Security Modules**.

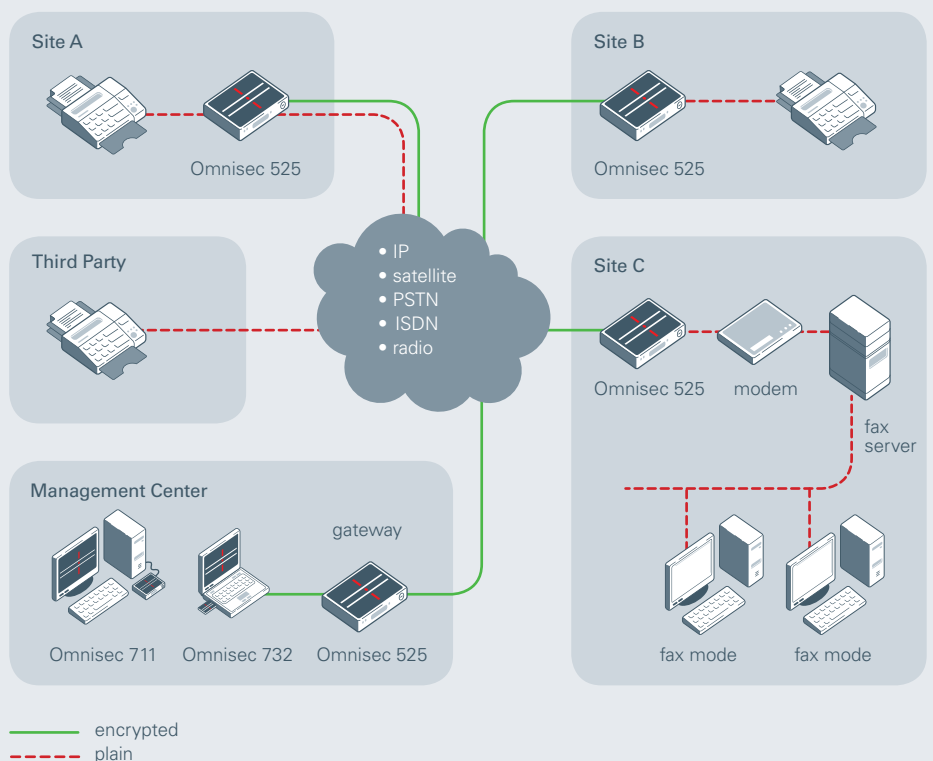
Customers are invited to assess and verify for themselves the implemented encryption procedures and algorithms.

The **Facsimile Encryptor Omnisec 525** is designed to secure your worldwide fax communications within your organization or enterprise. It is inserted between any standard G3/Super G3 fax machine and the telephone line and allows fax messages to be sent and received simultaneously.

The security concept behind this solution ensures that the partner fax device is authenticated and the messages encrypted to guarantee their confidentiality. Encryption is independent of the transparency of the communication channel, so the Omnisec 525 can be deployed over the PSTN or any other public or private network such as ISDN, IP, radio or satellite networks.

Its many features include a broadcast function, allowing a fax message to be sent to a group of predefined recipients without any interaction from the sender and a secure encrypted mailbox to prevent confidential messages from being read by unauthorized persons. It also provides accurate reporting of the status of the messages – transmitted, received, printed or deleted.

**The management tools.** The Key Management Center Omnisec 711 programs the Security Modules for the Omnisec 525 units. The Security & Network Management Center Omnisec 732 manages the Facsimile Encryptors and supports offline/online distribution of the configuration, keys, and firmware updates via encrypted authorized connections.



# Facsimile Encryptor Omnisec 525

## Features of Release 3.x

The Omnisec 525 is designed to provide the customer with the highest level of confidentiality, data integrity, authenticity, and non-repudiation, based on Omnisec's verifiable security architecture OmniCrypt™.

## User Advantages

- Easy installation, operation, and maintenance
- Easy integration into existing environment
- Supports fax over IP
- Completely transparent to the user
- Compatible with any G3 or Super G3 fax
- Secure encrypted fax mailbox
- Broadcast function
- Watermark on received messages
- Centralized configuration and key distribution
- Basic secretary function
- Language support for German, English, Spanish, French
- Country-specific line pre-settings
- Configuration report printable on attached fax

## Technical Functions

- Automatic adaptation of connection speed up to V.34 (33.6 kbit/s)
- Compatible with Omnisec 520
- Analog interface on plain and cipher side
- Store-and-forward operation
- Integration into OmniCrypt™ online network management architecture
- Serial interface for configuration
- Message and transaction status logging and reporting
- Remote configuration and diagnostics
- Local and remote firmware updating
- Built-in Test Equipment (BITE)
- Blacklisting of lost or stolen Security Modules

## Security Features

### Security architecture OmniCrypt™

- Multi-barrier software and hardware architecture with supervision mechanisms
- Omnisec-proprietary algorithms

### Master Keys

- Derived from a true white-noise source
- Length 256 bit; diversity:  $10^{77}$

### Session Keys

- Diversity:  $10^{77}$
- Used once and only once
- Automatic renewal for each fax session

### Key Management

- Online/offline key distribution
- Built-in Key Equipment (BIKE) for up to 10 stations
- Authenticated Key Agreement (AKA) protocol to generate secret Master Keys

### Mechanical Protection

- Lock prevents unauthorized opening of the unit and locks in the Security Module
- Tamper-evident casing

### Emergency-erase Function

- Erases Master Keys

## Technical Data

### Controls

- 2 slots for Security Modules
- 3 LEDs for system and interface status
- 1 LCD for management information
- 8 pushbuttons for menu navigation and to trigger emergency erasure

### Interfaces

- 2 PSTN RJ-11 ports
- RS232/V.24 9-pin management port
- USB management port

### Power

- Voltage: 100 ... 120/200 ... 240 VAC, 50 ... 60 Hz (external power supply)
- Power consumption: ~25 VA
- Lithium battery for data retention

### Safety Conformity

- EN 60950-1:2006/IEC60950-1:2005
- RoHS compliant

### Electromagnetic Compatibility (EMC)

- Radiation: EN 55022 class B
- Immunity: EN 55024

### Environmental Test Specifications

- Temperature range (IEC 60068-2-1 Ad, IEC 60068-2-2 Bd): storage:  $-25 \dots +70 \text{ }^\circ\text{C}$ ; operation:  $0 \dots 50 \text{ }^\circ\text{C}$
- Humidity (IEC 60068-2-78 Cab):  $40 \text{ }^\circ\text{C}$ , 93% RH, non-condensing, 10 days; 8 days in operation
- Random vibration (MIL-STD-810E, method 514.4-7)<sup>1</sup>:  $10 \dots 40 \text{ Hz}$ ,  $0.015 \text{ g}^2/\text{Hz}$ ,  $40 \dots 500 \text{ Hz}$ ,  $0.00015 \text{ g}^2/\text{Hz}$ , 3 axes each 1 h, equivalent to 1000 miles common carrier transportation
- Shock (IEC 60068-2-27 Ea): 100 g, 6 ms
- Fall (IEC 721-3-2 2M2)<sup>1</sup>: 1.2 m on concrete
- Drop (IEC 60068-2-31 Ec): 0.1 m on concrete (all corners/edges)

### Reliability

- MTBF (MIL-STD-217F, Notice 2, IC's: CF 0.1 [experience] according to IEC 62380) at  $t_{\text{amb}} = 25 \text{ }^\circ\text{C}$ : 57 000 h

### Dimensions

- w × h × d: 343 × 50 × 259 mm
- Weight: 2.5 kg (incl. power supply)

## Management Tools

- Key Management Center Omnisec 711 and Security Module Programmer Omnisec 704
- Security & Network Management Center Omnisec 732 for offline/online configuration, key, and firmware updating
- Blacklisting functions

<sup>1</sup> in transport package

We strive to continuously improve our offerings and therefore reserve the right to change specifications without notice.