



## Product Overview – 100% NCR Compatible EPP-Keyboard

## General Information

ZT598J EPPs are a PCI approved Encrypting PIN Pad designed for NCR 56xx, 58xx PersonaS and 66xx SelfServ ATMs. ZT598J is a 100% transparent hardware drop-in replacement for the original NCR EPP. There are no software changes required on the ATM.

- ✓ Plug & play compatible with NCR SDC and USB EPPs
- ✓ Compatible with all versions of NCR APTRA/AANDC
- ✓ Compatible with all versions of NCR S4i/NDC+ (SDC variant only)
- ✓ BAPE (-B) and EKC (-E) legacy mode support (SDC variant only)
- ✓ DAPI1 and DAPI7 mode of operation (SDC variant only)
- ✓ LGCY and INTL mode of operation (USB variant only)
- ✓ Vandal-proof metal keytips
- ✓ Built-in heater for use in Through-the-Wall ATMs
- ✓ PCI 5.0 Approved

### SDC variant



SDC variant mounted in a 56xx/58xx compatible housing with SDC interface board

### USB variant



USB variant mounted in a 66xx compatible housing with USB interface board



ZT598J in 56xx/58xx housing with SDC interface board



ZT598J in 66xx housing with USB interface board



# Keypad Features

## Security Performance

- Tamper Resistant
- Foreign matter ingress protection from the back cover
- EPP removal detect (USB only)
- SPA and DPA attacks detect
- Kuhn attack detect
- Secure firmware download & upgrade
- Guaranteed MTBF: 100,000 hours minimum
- Data retention lifetime: ≥5 years without external power supply attached

# PCI 3.0 Approval & Prolongation

ZT598J has been approved to conform to Payment Card Industry (PCI 3.0) PIN Entry Device Security requirements.

- ✓ Approval Number: 4-10157
- ✓ Approved at: 06.06.2014
- ✓ Next Renewal at: 30.04.2021

The reference can be also found at the [PCI Security Standards Council](#) web site :

- [List of Validated Products](#)
- [PCI 3.0 Certificate](#)
- [PCI 3.0 Prolongation](#)

## Support Functions

Built in beeper

PIN encryption with following PIN formats:

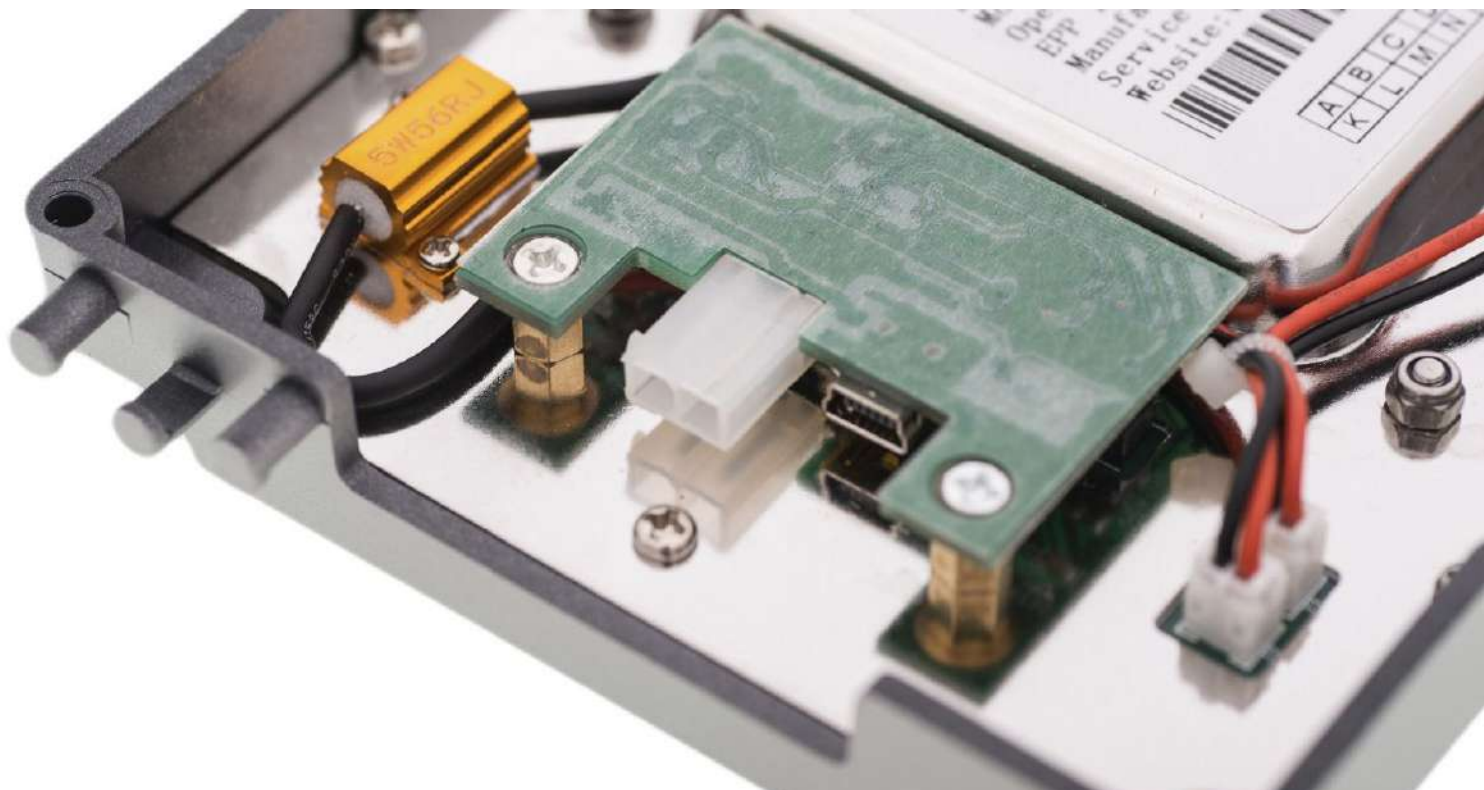
- ANSI X9.8
- ISO 9564 format 0
- ISO 9564 format 1
- EC12
- ISO 9564 format 3
- IBM3624
- Diebold
- DieboldCo

## Key performance

Algo-rithm	Key length(bit)	Algorithm	Average speed (ms)
RSA	2048	Key generation	16,000
		Decryption/Signature	450
		Encryption/Verification	6
DES	128	256 Bytes Encryption/Decryption	35
		1024 Bytes Encryption/Decryption	55
		2048 Bytes Encryption/Decryption	110

## User data encryption / decryption with following algorithms:

- Electronic Code Book (ECB)
- Cipher Block Chaining (CBC)
- Cipher Feed Back (CFB)



ATM Services GmbH  
Wilhelm-Roentgen-Str.1  
82380 Peissenberg  
Germany

Phone: +49-881-927-919-00  
info@atm-services.de  
sales@atm-services.de  
www.atm-services.de