

XKT-S1

- ☰ XKT-S1 Hardware Security Module
- ☰ Providing security protection on the physical level
- ☰ Support Hyperledger Fabric



☰ Encryption Algorithm and Key Storage

Cryptographic Algorithm

- Symmetric Encryption Algorithms : SM1、SM4、ZUC
- Asymmetric Cryptographic Algorithms : SM2、ECC、RSA
- Digest Algorithm : SM3、SHA256/SHA384...

Key Storage

- RSA : 1024 pairs
- SM2 : 1024 pairs
- Symmetric Key : 2048 entries

☰ Encryption Operation Throughput and Supported Interface

Encryption Operation Throughput

- SM1 Encryption / Decryption : 105Mbps
- SM2 Signature Generation : 46000 times per second
- SM2 Signature Verification : 11000 times per second
- SM3 Digest Algorithm : 700Mbps
- SM4 Encryption / Decryption : 750Mbps
- RSA2048 Signature Generation : 1800 times per second

Supported Interface

- GM/T 0018-2012 SDF interface
- PKCS#11 interface
- CSP interface
- JCE interface
- OPENSSL interface

- RSA2048 Signature Verification : 38000 times per second

☰ Mechanical and Operation

- Reliability : MTBF ≥ 30000 小时
- Ethernet Interface : 10/100/1000M
- Size (Width*Height*Depth) mm : 425*88*560
- Weight : 11KG
- Color: Matte Black
- Shell Structure: Metal Chassis

☰ Electrical Features and Environmental Parameters

Electrical Characteristics

- Working Voltage: : 220V±20%
- Maximum Power Consumption : 200W
- Environmental Indicators: Meet RoHS2.0 Environmental Requirements

Environmental Request

- Operating: 0 °C to +40 °C, 5-90% RH , non-condensing
- Storage: -20 °C to +70 °C, 5-90% RH, non-condensing