Thales Palm Scanner CS500q

Identity & Biometric Solutions

The Thales Palm Scanner CS500q is a Live Scan for Law Enforcement applications. Offering superior image quality and matchless acquisition speed the Thales Palm Scanner CS500q acquires not only 10-prints, rolls and half-palms prints but also all types of supplemental prints as per FBI standards: thenar (ball of palm), full finger (distal, medial and proximal) and fingertip impressions.

Provided with an integrated heater, it keeps the prism's surface at the right temperature and provides assurance in achieving the best fingerprint acquisition, even in low temperature environments.

FBI APP. F Certified and APP.P Compliant

CS500q Palm Scanner can address all the applications scenarios where FBI IAFIS IQS Appendix F certified palm, 10-prints and rolled acquisitions are requested.

Having a resolution of 500 dpi and an active window of 5" x 5" the Thales Palm Scanner CS500q allows for an acquisition speed of up to 8 fps in full frame mode and up to 25 fps for rolled prints.

An easy-to-integrate and features rich SDK for all common platforms reduces integration time to a minimum, thus making the Thales Palm Scanner CS500q the perfect choice for system integrators and solution providers.

Multiscan SDK Features

- CORRECT POSITION AND SLAP COMPLETENESS CHECK: checks for correct finger and palm placing; checks for incomplete slaps or palm.
- ELIMINATION OF LATENT PRINT: originating from recent scans.
- HALO ELIMINATION: elimination of halo due to moist fingerprints during acquisition.
- ROLLED FINGERPRINT CAPTURING: displays in real-time, self-adaptive to rolling speed and directions, automatic stop detection.
- SEGMENTATION: automatic segmentation of four-slap and two thumbs fingerprint images in single flat images.
- AUTOMATIC ACQUISITION START AND STOP: sensing of finger placement and automatic acquisition of the image with the highest quality.
- SLIDING DETECTION FOR FLAT PRINTS: detects deformations of fingerprints due to sliding during acquisition.
- REAL TIME IMAGE QUALITY CHECKING: real-time estimation of fingerprint image quality during scanning process according to NISTIR7151(NFIQ and NFIQ2).
- IMAGE COMPRESSION: FBI certified jpeg2000 FP
- ADAPTIVE ROLLED ACQUISITION: rolled acquisition on all the front prism area.
- DRY FINGER IMAGE ENHANCEMENT: low contrasted images due to dry skin conditions are automatically improved.
- LOWER VS. UPPER PALM IDENTITY CHECK: based on inter digital area to check if both half-palm images are from the same hand.
- SEGMENTATION AND SEQUENCE CHECK FOR UPPER PALM: for cases when the upper palm is acquired instead of 4-finger slap.
- ARTIFACTS CONTROL: detects artifacts created during improper rolled print acquisition.

The CS500q Palm Scanner can also acquire supplemental prints such as rolled thenar prints, full finger prints and fingertip prints.

User-Friendly Ergonomics

Well studied ergonomics and a full color LCD touchscreen help enhancing the workflow efficiency while reducing the need for skilled operators.

The Thales Palm Scanner CS500q is designed with a small footprint, it can be used in a desktop setting or integrated into other systems like kiosks.

Technical Data

ACTIVE SCANNING WINDOW	• 4-slaps and half-palms up to 5" x 5" • Rolled thenar up to 4.5" x 3" • Flat Fingertips up to 3,2" x 3,0" • Rolled fingertips up to 1,6" x 1,6" • Image Resolution: 500 dpi - 256 gray
INTERFACE	USB 3.0
IMAGE QUALITY AND FORMATS	• FBI IAFIS IQS Appendix F certified and Appendix P compliant • ANSI/NIST-ITL 1-2007/2011, ISO/IEC FCD 19794-4 • ANSI/NIST-ITL 1-2000, ANSI/NIST-ITL 1-2000 Interpol Implementation
TEMPERATURE	• Storage: from -20°C to + 60°C • Operating: from 0°C to +50°C
HUMIDITY	From 10% to 90% (non-condensing)
DIMENSIONS	227 x 310 x 187 mm
WEIGHT	4,7 Kg
SUPPORTED OPERATING SYSTEMS	• Microsoft Windows up to Win11 64-bit configuration • Linux Ubuntu and Fedora distributions in 32-bit and 64-bit configuration • Android
IP RATING	IP54
CERTIFICATIONS	CE, FCC, RoHS
POWER SUPPLY	• Input 100-240 Vac, 50 - 60 Hz. Output 5Vdc, 30W max • Powered by USB 3.0 port if heater is not activate
OPTIONS	Silicone Membrane

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