ib

INTEGRATED
BIOMETRICS

DANNO

**The Smallest, Most Affordable FBI Certified
FAP 30 TFT Fingerprint Sensor**

· Automatic Spoof Rejection
· Software-Based Autodetect

DANNO

For embedded mobile applications
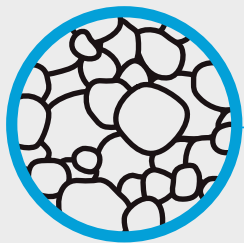
Weighs less than 20 grams / .6 oz

Supports single-finger
enrollment and verification

Integrated Biometrics' Danno single-finger FAP 30 scanner delivers FBI-certified fingerprint images in the thinnest, most affordable, format available.

Small and lightweight, Danno enables 1-finger flat enroll-ment, identification and verification from a device that weighs less than 20g / .6 oz. Designed for embedded ap-plications, Danno combines performance and durability with the compact size and low power consumption that mobile identity management applications demand.
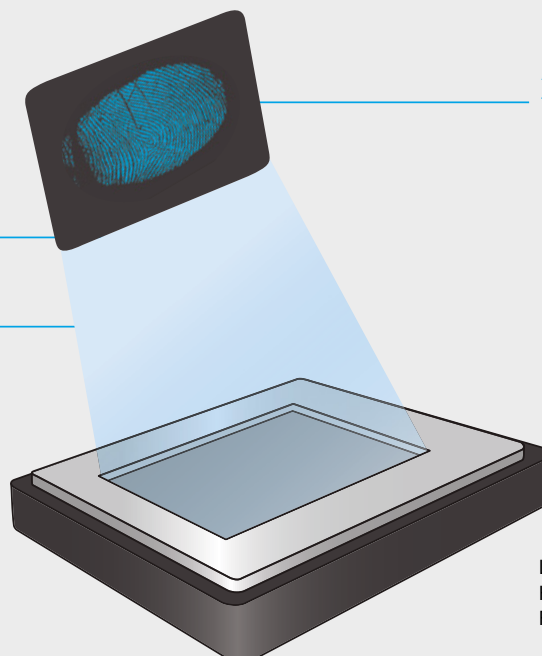
LES Light Emitting Sensor Technology

Integrated Biometrics' scanners use our patented light-emitting sensor (LES) technology to deliver fixed and mobile FBI certified fingerprint imaging in an exceptionally durable, lightweight scanner.

A TFT camera captures the glow from the phosphor particles, producing a high-resolution fingerprint image

Underside view of
LES Sensor Film

LES film contains luminescent phosphor microparticles that respond only to human fingers when they touch the film

LES Phosphor Particle	•	13-32 µm
Human Hair	●	50-70 µm
Fine Beach Sand	●	90 µm

FEATURES & BENEFITS

Faster
· Rapid dry finger capture

· No need to clean latent prints in high-volume situations

· Easy integration via single SDK for all Integrated Biometrics FBI-certified products

Better
· Unaffected by extreme temperatures, direct sunlight, or bright artificial lights

· Compact, lightweight, and rugged

· Rejects common spoofing attacks

· Emits no bright lights during scans

· Meets or exceeds US military durability specifications

Smarter
· Competitive pricing

· Extremely low power consumption

· Eliminates consumables (silicone membranes or cleaning tape)

· Lower maintenance costs

Hardware-based Automatic Spoof Rejection

IB's LES film recognizes real versus manufactured fingerprints. LES-based scanners automatically reject fingerprints based on silicone, glue, rubber, and other common spoofing materials.

Software-Based Autodetect

IB's LES technology automatically detects the finger capture that generates the highest quality image without user intervention. Application developers enable this feature through the IB's software development kit (SDK).

AVAILABLE VERSIONS

Product	Part Number	Description
· Danno (OEM)	DN110CM-E00	FAP 30 TFT PIV Certified

OS Support & System Requirements. . . . .

OS Support
Windows 7 or later (32/64 bit), Linux Kernel 2.6 or later (32-bit, 64-bit, ARMv7-A, and ARMv8-A), Android 4.0 or later (32-bit, 64-bit, ARMv7-A, and ARMv8-A)

CPU
x86 and x64 | 2.0GHz or higher
ARM | 1.0 GHz or higher

Memory
512MB or higher

Images & Capture. . . . .

Sensor Type
LES

Camera
TFT

Resolution
500 PPI

Grayscale
256 grayscale dynamic range

Image Size
400 x 500 pixels

Supported Image Formats
RAW, JPEG2000, BMP, PNG, WSQ (FBI-approved)

FBI / Image Certifications
PIV 071006, FIPS 201, FAP30 / Certified to Mobile ID Requirements

Speed
Minimum frame rate > 10 FPS

API Interface
Capture single finger, Multi-device/muti-thread support

Quality Scoring
NFIQ v1 supported on all OSes and NFIQ2 for Windows

Weight & Dimensions. . . . .

Product Weight
< 25 grams / 0.06 lbs

Platen Size
21.52 mm x 26.6 mm / 0.85" x 1.05"

Sensing Area
20.32 mm x 25.4 mm / 0.8" x 1.0"

Scanner Assembly Dimensions
40.0 mm x 42.9 mm x 8.0 mm / 1.57" x 1.69" x 0.31"

Power & Connectors . . . .

Interface
USB 2.0 (Molex)

Power Source
USB Host

USB Voltage Level
4.75V to 5.25V

Sleep*
< 2mA
Feature not available on all models. Ask technical support for further information.

Conformance & Certifications. . . . .

USB Certification
USB-IF USB.ORG

FCC/CE Conformance
FCC Part15 (per ANSI C62.4:2003) Class A, CSA ICES-003 Class A, CE Emissions:EN55022:2006 Class A, CE Immunity EN 55024:1998/A1:2001/A2:2003, IEC61000-4-2

Air Discharge / Contact Discharge
In compliance with IEC 61000-4-2

Equipment Safety
IEC 60950-1

Hazardous Material
RoHS directive 2002/95/EC

Vibration Test
Per Mil-STD-810F (Method 514.5), Category 24, Flg.514.5C-17

Temperatures & Humidity . . . .

Operating Temperature
-10°C ~ +55°C / 14°F ~ 131°F

Humidity
30~85% RH < 40°C / 104°F (Non-condensing)

Storage Temperature
-40°C ~ +80°C / -40°F ~ 176°F

Surfaces & Systems . . . .

Ingress Protection / Water / Dust
IP65 Sealed bezel to scanning surface

Surface Durability
MIL-C-675c 4.5010, MIL-STD-810F

Cleaning & Sanitization
For proper cleaning and disinfection of IB products, visit integratedbiometrics.com/cleaning

Mean-Time Between Failures (MTBF)
Based on 200 full single-finger enrollments per day, the Danno MTBF is 66 years.

Warranty . . . .

All products have a 12-month warranty starting from the date of delivery. Additional years warranties available. Inquire with your salesperson.

View the warranty here: integratedbiometrics.com/warranty