

## Images & Capture

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### Usage

Indoor/outdoor rated, direct sunlight operation

### Sensor Type

Light-emitting sensor (LES) TFT camera

### Resolution

500 PPI

### Gray Scale

256 grayscale dynamic range

### Image Size

400 W x 500 H pixels

### Supported Image Formats

RAW, JPEG2000, BMP, PNG, WSQ

### FBI Certification / Image Certifications

PIV 071006, FIPS 201, FAP 30/

Certified to Mobile ID Requirements

### Speed

Minimum frame rate > 10FPS

### Capture Types

Single-finger flat

### API Interface

Capture single-finger direct,  
multi-device/multi-thread support

## Weight & Dimensions

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### Product Weight

20 grams / .6 oz

### Platen Size

21.52 mm x 26.6 mm / .85" x 1.05"

### Sensing Area

20.32 mm x 25.4 mm / .80" x 1.0"

### Scanner Assembly Dimensions

40 mm x 42.9 mm x 71 mm / 1.575" x 1.69" x .28"

## Power & Connectors

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### Interface

Parallel (8 bits) plus 12C control lines / SPI

### Power Source

USB Host

### USB Power Requirement / Consumption

3.30V: TFT power / 5V: LE power

Full scanning 170mA, standby <40 mA

## Conformance & Certifications

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### USB Certification

USB-IF USB.ORG

### FCC/CE Conformance

FCC Part 15 (per ANSI C62.4:2003) Class A; CSA ICES-003 Class A; CE Emissions: EN 55022:2006 Class A; CE Immunity: EN 55024:1998/A1:2001/A2:2003, IEC 61000-4-2

### Air Discharge / Contact Discharge

In compliance with IEC 61000-4-2

### Equipment Safety

IEC 60950-1

### Hazardous Material RoHS Certified

RoHS directive 2011/65/EU with amendment: 2015/863

### Vibration Test

per Mil-STD-810F (Method 514.5), Category 24, Fig. 514.5C-17

## Temperatures & Humidity

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### Operating Temperature

-10°C ~ +55°C / 14°F ~ 131°F

### Humidity

30~85% RH < 40°C (non-condensing)

### Storage Temperature

-40°C ~ +80°C / -40°F ~ 176°F

## Surfaces & Systems

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### Ingress Protection / Water / Dust

IP65 (sealed bezel to scanning surface)

### Surface Durability

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

### Surface Resistance / Allowable Cleaning Chemicals

Ammonia, IPA, methanol, soaps, detergents, salt water

### OS Support

Embedded Linux, Android 4.0+

## Warranty

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1 year hardware warranty

(extended warranty available upon request)





# DANNO

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

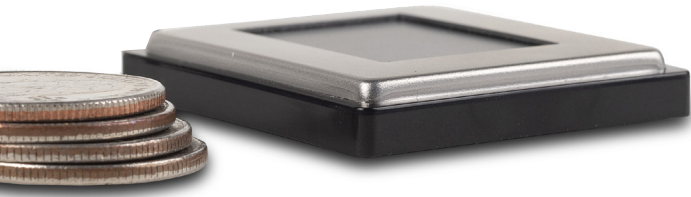
- Automatic Spoof Rejection
- Software-Based Autodetect



# 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 enrollment, identification and verification from a device that weighs less than 20g / .6 oz. Designed for embedded applications, Danno combines performance and durability with the compact size and low power consumption that mobile identity management applications demand.

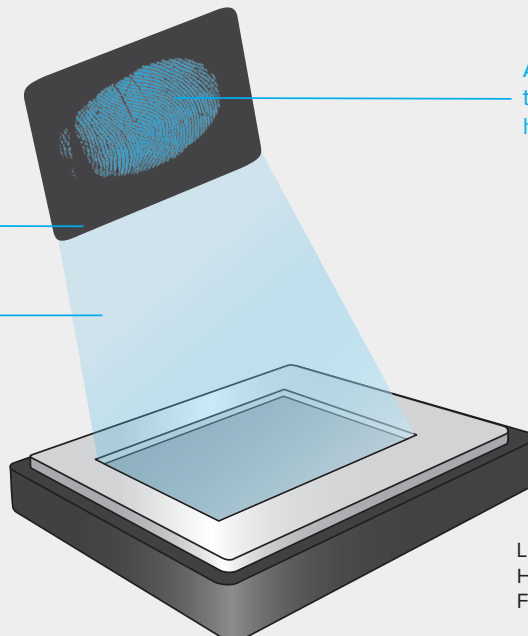
## LES Light Emitting Sensor Technology

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.



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

Underside view of LES Sensor Film



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

LES Phosphor Particle	•	13-37 $\mu\text{m}$
Human Hair	•	50-70 $\mu\text{m}$
Fine Beach Sand	•	90 $\mu\text{m}$

# 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

- Danno (OEM)

## Part Number

DN110CM-E00

## Description

FAP 30 TFT PIV Certified

