

## Lumidigm® V-Series Fingerprint Sensors



### Benefits

- The industry's best fingerprint images
- Meets high-performance challenges
- Designed for easy integration
- Superior liveness detection protects against fake and spoof fingerprints
- Eliminates failure to enroll (FTE) and failure to acquire (FTA) headaches
- Enables high throughput
- Requires minimal maintenance
- Yields a high return on investment for integrators and end-users

### Features

- Patented multispectral imaging technique looks at and beneath the skin surface, simultaneously
- Flexible, powerful device outputs
  - Image • Template • Match score
- Compact design
- State-of-the-art liveness detection technology adaptable against future spoof threats
- Expansive operating range
  - -10 to 60°C, wet or dry
- 500 dpi

## Lumidigm V-Series fingerprint sensors perform like no other... anytime, anywhere!

Lumidigm V-Series fingerprint sensors deliver industry-leading biometric performance regardless of environmental or skin conditions. You can depend on the V-Series to return superior images on anyone, anytime, in any environment.

### Superior Performance

Lumidigm V-Series fingerprint sensors outperform other sensors by improving your application's throughput, accuracy, speed, and security. Let Lumidigm patented technology solve your management hassles and users' frustration by delivering the high-quality images you expect...every time.

### Image is Everything

Lumidigm multispectral imaging technology simultaneously reads the surface and subsurface to capture clear, clean images every time—even when surface features

are absent or hard to distinguish due to age, dirt, finger pressure, and skin or environmental conditions. Our sensors enroll and verify every fingerprint including those that thwart conventional sensors. Solve failure to enroll (FTE) and failure to acquire (FTA) issues with Lumidigm V-Series fingerprint sensors.

### Superior Liveness Detection

Eliminate performance problems associated with conventional fingerprint sensors. Lumidigm V-Series sensors protect against fake and spoof fingerprints by capturing detailed surface and subsurface data from the fingertip. Using the biometric industry's best liveness detection technology, Lumidigm provides the most secure and accurate sensors available—over 20,000 samples tested and detected to date.

| V30x Sensors  |   | V31x Sensors  |
|---|---|---|
| <b>IMAGING SYSTEM</b>   |   |   |
| <b>Technology</b>   | Patented Lumidigm optical multispectral imaging   |   |
| <b>Image resolution / bit depth</b>   | 500 dpi / 8-bit, 256 grayscale  |   |
| <b>Platen area</b>  | 0.7" x 1.1" (18mm x 28 mm) ellipse  |   |
| <b>BIOMETRIC FUNCTIONS</b>  |   |   |
| <b>Image out</b>  | ANSI 381 compliant  |   |
| <b>Template out</b>   | ANSI 378 compliant  |   |
| <b>Score or verification (1:1)</b>  | Requires ANSI 378 template input  |   |
| <b>Identification (1:N)</b>   | Available (V30x-30 only)  | Uses ANSI 378 templates as input  |
| <b>Latent detection</b>   | Included  |   |
| <b>Latent protection</b>  | Included  |   |
| <b>TEMPLATE STORAGE</b>   |   |   |
| <b>Verification mode (1:1)</b>  | Up to 1000  | Unlimited   |
| <b>Identification mode (1:N)</b>  | Up to 400 (V30x-30 only)  | Up to 1000 users per group, unlimited groups  |
| <b>BIOMETRIC PERFORMANCE</b>  |   |   |
| <b>Finger placement to image</b>  | 1.3 sec. (typical)  | 800 ms - 1 sec (typical)  |
| <b>Finger placement to template / score</b>   | 2.0 sec. (typical)  | 900 ms - 1.1 sec (typical)  |
| <b>Finger placement to identification</b>   | 2.1 sec. (typical, V30x-30 only)  | 950 ms - 1.1 sec (typical)  |
| <b>ENVIRONMENTAL</b>  |   |   |
| <i>Note: biometric performance is maintained throughout the operating ranges specified.</i> |   |   |
| <b>Ingress protection at platen</b>   | IP65  |   |
| <b>OPERATING WITH ENCLOSURE</b>   |   |   |
| <b>Temperature</b>  | -10 to 60°C   |   |
| <b>Humidity</b>   | 0-100% RH condensing  |   |
| <b>ESD Immunity</b>   | IEC 61000-4-2 Level 4+/-15 kV Air   |   |
| <b>INTERFACE</b>  |   |   |
| <b>USB 2.0</b>  | 480 Mbps high-speed   |   |
| <b>Operating systems supported</b>  | Windows 8 / 8 Embedded (32/64-bit)<br>Windows 7 / 7 Embedded (32/64-bit),<br>Windows XP / XP Embedded<br>Linux<br>Android | Windows 8 / 8 Embedded (32/64-bit)<br>Windows 7 / 7 Embedded (32/64-bit)<br>Windows XP / XP Embedded<br>Linux (Intel 32-bit and 64-bit) |
| <b>Encryption</b>   | n/a   | Encrypted video for privacy/playback protection   |
| <b>FORM FACTOR</b>  |   |   |
| <b>Overall dimensions</b>   | 3.25"W x 4.00"D x 2.35"H (8.3 cm x 10.2 cm x 6 cm)  |   |
| <b>Housing</b>  | Painted magnesium alloy, IP65 rating  |   |
| <b>POWER SUPPLY REQUIREMENTS</b>  |   |   |
| <b>Supply current – operational</b>   | +5 VDC 500 mA (peak)  | +5 VDC 300 mA (peak)  |
| <b>Supply current – idle</b>  | +5 VDC 100 mA (typical)   | +5 VDC 100 mA (typical)   |
| <b>STANDARDS COMPLIANCE</b>   |   |   |
| <b>Interoperability</b>   | ANSI 378, ISO 19794-2:2005, ANSI 381, ISO 19794-4:2005, NFIQ compliant, MINEX-certified algorithm                         |   |
| <b>Device certifications</b>  | CE, FCC Part 15 Class B, EN 60950, IEC 62471, RoHS, DEA EPCS, Certified support for thin clients                          |   |
| <b>MINIMUM SYSTEM REQUIREMENTS</b>  |   |   |
| <b>Interface</b>  | USB 1.1   | High-speed USB 2.0 (480 Mbps)   |
| <b>Memory</b>   | n/a   | 64 MB free RAM  |
| <b>Operating system</b>   | n/a   | Supported OS required   |

