

# **UIDAI Biometric Device Specifications (Authentication)**

**BDCS(A)-03-08**

## **STQC - IT Services**

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## SINGLE FINGER PRINT SCANNER FOR AUTHENTICATION

<u>Parameters</u>	<u>Specification</u>
<b>Minimum Platen Area</b>	<p><b>Optical/multispectral/capacitance technology</b></p> <p><b>1. If platen area is 15.24 mm x 20.32 mm or more:</b></p> <p>1.1 Provisional certificate would be issued without any field testing;</p> <p>1.2 Final certification would be subject to sensor-extractor meeting &lt;2% FRR in Aadhaar authentication system (at FAR of 0.01%) for which detailed guidelines will be published by STQC.</p> <p>2. If platen area is 12.8 mm x 16.5 mm but less than 15.24 mm x 20.32 mm, certification would be subject to sensor-extractor meeting &lt;2% FRR in Aadhaar authentication system (at FAR of 0.01%) for which detailed guidelines will be published by STQC.</p> <p><b>Any other Technologies</b></p> <p>3. &lt;2% FRR in Aadhaar authentication set up (at FAR of 0.01%) would need to be demonstrated. Detailed guidelines and other requirements specific to the technology will be published separately by STQC.</p>
<b>Image quality</b>	<p>Must be listed on "IAFIS Certified Product List" posted on <a href="https://www.fbibiospecs.org/IAFIS/Default.aspx">https://www.fbibiospecs.org/IAFIS/Default.aspx</a> under "PIV Single Finger Capture Devices" <b>OR</b></p> <p>Lab Test conformance report showing compliance to ISO 19794-4 Annexure A <b>OR</b></p> <p>any other equivalent conformance report (to be approved for equivalence by expert committee appointed by Competent Authority)</p>
<b>Extractor Quality</b>	<ul style="list-style-type: none"> <li>• MINEX compliance</li> <li>• Number of Minutiae generated by extractor to be in conformance to ISO Specification. Tested for at least 12 Minutiae points generated under test conditions.</li> </ul>
<b>NFIQ Quality Software</b>	Inbuilt NFIQ quality software either at device level or extractor level.

<b><u>Parameters</u></b>	<b><u>Specification</u></b>
<b>Resolution</b>	Minimum 500 DPI with 5% margin on the lower side
<b>Grey scale/ Image type</b>	8 bit, 256 levels
<b>Extractor &amp; Image Template Standard</b>	ISO 19794-2 for fingerprint minutiae template and ISO 19794-4 for Fingerprint Image Template
<b>Maximum Acquisition time(Placement to Template)</b>	< 2 secs
<b>Audio/Visual indication</b>	A/V indication either at device level or at application level for indicating various events like: <ul style="list-style-type: none"> <li>a) Indication for placing finger</li> <li>b) Start of capturing</li> <li>c) End of capturing</li> </ul>
<b>Liveness Detection</b>	Preferable
<b>Latent detection</b>	Preferable
<b>Platen</b>	Rugged, minimum IP 54 rating preferable Prefer scratch resistant features
<b>Preferred Operating Temperature</b>	0 to 45 degree Centigrade
<b>Preferred Storage Temperature</b>	0 to 50 degree Centigrade
<b>Preferred Humidity</b>	10 to 90%
<b>ESD</b>	>= 8Kv
<b>Environment, health and safety</b>	ROHS certification
<b>Safety</b>	UL or IEC60950 compliance
<b>EMC compliance</b>	FCC class A or equivalent

<b><u>Parameters</u></b>	<b><u>Specification</u></b>
<b>Operating system environment</b>	Vendor needs to declare the compatible operating system
<b>Connectivity</b>	<ol style="list-style-type: none"> <li>1. Standard USB connectivity for PC based application.</li> <li>2. Connectivity for POS devices.</li> </ol>

*Note: These specifications are subject to change based on field findings.*