

# **QR Code Scanner Certification Scheme (QRCS-CS)**

## **Guidelines to the Vendors for QR Code Scanner**

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**Purpose:**

Purpose of this document is to provide guidance to Suppliers/Vendors of QR Code Scanner, to describe requirements for documentation and facilitate preparation of Technical Construction File (TCF) so that compliance with UIDAI's requirements can be demonstrated.

**Procedure:**

The compliance demonstration can be done through technical construction file.

**Requirements of Technical Construction File (TCF)**

To create confidence in the Device Quality and to demonstrate compliance, Supplier shall maintain a technical construction file. This will require close collaborations of supplier with the manufacturer. The confidential part of this file may not be revealed to the Certification Body, only summary/principles used of confidential part of the file may be informed to the Certification Body on need base. The general content of the TCF are

**General**

- General description of the product and reference to Website (Website should clearly display the device image and technical specifications)
- QR Code Scanner Specification (may be in the form of brochure) of the Supplier
- Summary of Quality Control System in reference to supplier activities of distribution (of QR Code Scanner), maintenance and support system
- Risk Assessment and/or recommended practice for the use of device in the Indian conditions and Mitigation Plan
- Incoming quality control mechanism (**Optional**)
- User Manual and 3 devices to be provided for testing to the Test Laboratory

**Certificates**

- Certificate for ISO 9001 (Certification for QR Code Scanner, Design and Development, Manufacturing and Service) by the Manufacturer/OEM
- Certificate for ISO 9001 (Certification for QR Code Scanner Supply and Distribution, Training, Maintenance, and Service (Supplier)(**Optional**)
- Certificate of Incorporation in India (Supplier)
- Manufacturer's authorization to supplier to place devices in Indian market
- Service Center – List of authorized Service centers and Contact details
- BIS Registration Letter(CRS) indicating compliance with IS 13252 (Part 1): 2010

**Data sheets and Catalogues**

- Image sensors
- Light Source
- Engine
- Decoder (If separate, must be specified and required document to be provided.)

**Test Reports ( References )**

	Test – Refer Test Plan	Category identification which is constituent of TCF (to be filled by applicant)
Functional Test	1,2,8,	
Environmental(Durability/Climatic)	21,22	
Safety	25	
Electro Magnetic Compatibility	20	
Ease of use and Ergonomics and Portability	9,10,11	
Health and Safety	26	

#### Category

- a. Internal test report
- b. External test report from recognized independent test lab
- c. To be conducted by STQC Lab

#### Declaration of Conformities

1. The applicant (supplier) shall provide a declaration of conformity stating that their candidate product (of certification) meets all the specified requirements of UIDAI and they have established quality management system at their manufacturing site to ensure consistency of the product, quality while complying with the UIDAI specifications.
2. ROHS

#### Technical Information

TCF shall provide the necessary evidence that the design is in accordance with the relevant requirements.

TCF shall identify the product and its specification consisting of its description in terms of

- Photographs, brochures
- Technical construction drawing and/or
- Schematic diagram

#### Warranty

##### ***Minimum Requirements***

Suitable warranty support to be declared and should be available on public domain

#### Demonstration of Compliance

The supplier shall make a chapter in the technical construction file indicating the mechanism used to demonstrate compliance with UIDAI's specification as specified.

## Test Plan (Total number of devices 3)

Sl. No.	Device	Description	Specifications	Compliance Demonstration
1	ALL THREE	Visual Examination		No loosening, breaking and other mechanical damage of parts
2	ALL THREE	Operational Check		Device shall function satisfactorily , Basic operation
3	First	Image Sensor (Pixels)	640 x 400 pixels	
4	NA	Symbologies	QR Code	As per ISO/IEC 18004 As per ISO/IEC 15424 *Declaration - No testing
5	First	Pitch/Skew	+/- 60°, +/- 60°	*Jigs and Fixtures to be provided by applicant
6	First	Scan Angle	Roll 0-360°	*Jigs and Fixtures to be provided by applicant
7	First	Min. Symbol Contrast	<= 25%	
8	First	Interface	USB	

9	First	Dimensions	Ergonomically designed product	
10	First	Weight	<250g	
11	First	Indication	Buzzer, Indicator light LED	
12	First	Operating Power	must be as per USB 2.0/3.0 standard requirement	
13	First	Input Voltage	must be as per USB 2.0/3.0 standard requirement	
14	First	Motion tolerance	Up to 5 in./13 cm per second for 13 mil UPC	*Jigs and Fixtures to be provided by applicant
15		Light Source	LED 350-770nm	
16	First	Operating Temperature	0°C to 50°C	
17	First	Storage Temperature	-20° to 70° C	
18	Second	Functional Test	Black Box Testing	Reference application as provide by UIDIA and along with UIDIA approved reference <b>Secure QR Code</b> .
19	Second	Humidity	5% to 95% non-condensing	93 ± 3% RH 40° C ( Pre and post test condition 1 and 2)
20	Second	ESD	+/- 4 kV contact discharge; +/- 8 kV air discharge	As per IEC 61000-4-2 ( Pre and post test condition 1 and 2)
21	Third	DROP	1m, Unpacked Condition	As per IEC 60068-2-31 No of drops: Six drops (one drop on each face) Height of fall: 1m Condition : Unpacked ( Pre and post test condition 1 and 2)
22	Third	Environment Sealing	IP42, As per IEC 60529	As per IEC 60529 ( Pre and post test condition 1 and 2)
23	First	Decode Range	1" to 10" for 20 mil QR Code	
24	NA	Service Center	Should Be Available in India	*Declaration and list
25	NA	Safety Standards like LED safety	IEC 62471:2006 IEC 60950-1:2005 + A1 + A2 (optional) IS 13252(PART 1):2010	a. IEC 62471:2006, Photobiological safety of lamps and lamp systems IEC-

				<p>CB test report – certificate</p> <p>b. IEC 60950-1:2005 + A1 + A2 (optional)</p> <p>c. IS 13252(PART 1):2010</p> <p><i>Demonstration of compliance by national and international certifications</i></p>
26	NA	ROHS		<p>IEC 63000</p> <p>Declaration of conformity</p>