Bharat Sanchar Nigam Limited

Acceptance Testing Test Cases document for Block Rack as per BSNL Bharatnet Tender No. MM/BNO&M/BN-III/T-791/2024 issued on 15.02.2024

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1. Introduction

This document outlines the Acceptance Testing (A/T) procedures for Smart Rack at Block, in accordance with the requirements of BSNL BharatNet Tender No. MM/BNO&M/BN-III/T-791/2024 dated 15.02.2024.

It covers the applicable test cases in line with industry best practices, relevant specifications and standards, and includes the acceptance testing template for quality assurance in accordance with the requirements specified in the RFP.

2. Acceptance Memorandum

a) Equipment description : **SMART BLOCK RACK**

b) Site Name with Block code :**INDPUR BO2780**

c) Site Address :**INDPUR BO2780 BLOCK : BANKURA DISTRICT**

d) Date & Time :**09/09/2026**

We hereby declare that all tests in this form were successfully completed.

Note (if any):

PIA Representative's Sign off	IE Representative's Sign off	BSNL Representative's Sign off*
Representative Name:	Representative Name:	Representative Name:
Designation:	Designation:	Designation:
Date:	Date:	Date:
Signature_____	Signature_____	Signature_____

*Note:

1. For first time AT of Block Router, GP Router, Block Rack, GP Rack, Route and Ring, one BSNL person may be kept mandatorily and his/her signatures are required on the AT document.
2. For subsequent ATs, BSNL may assign person on need basis or as requested by any PIA. Decision regarding the same shall be taken by BharatNet State Head on case-to-case basis.

Certification verification

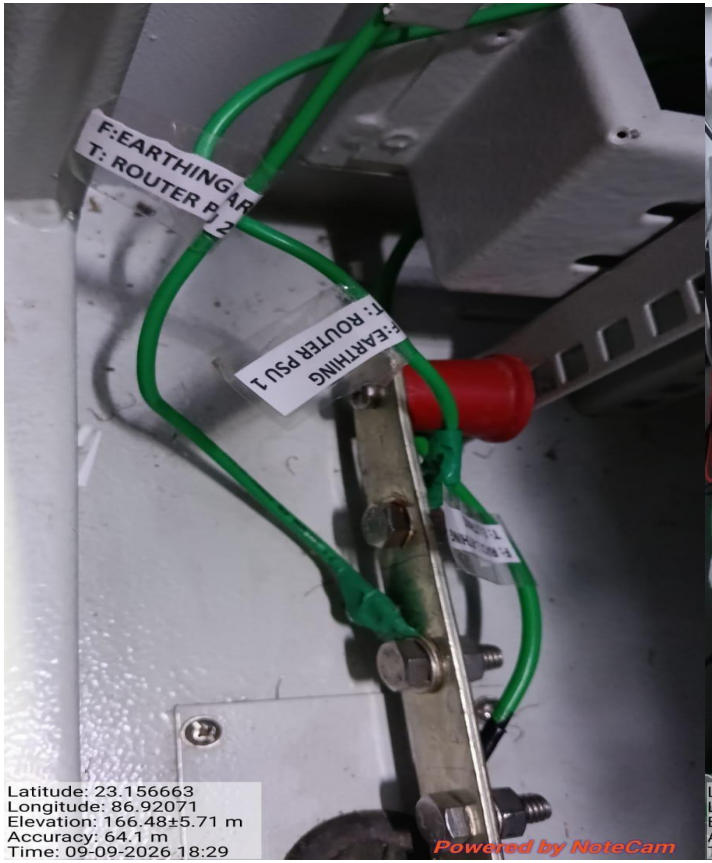
Rack: DIN41491, DIN41494, and IEC297. All products/OEM: ISO 9001, 14001, ISO 45001 and IS13252: PART1 (2010) & IEC 60950-1. Protection category: IP55: IS/IEC60529:2001. Certificate from NABL accredited lab shall be attached	Declaration
TSEC Certificate	Date of TSEC
QA Certificate	INDPUR RACK COPY.pdf
QR Code, logo	Photo evidence
OEM approval by BSNL	OEM approval For RACK.pdf
Documentation requirements	Test 1: The contractor shall provide following documents: a. System description documents b. Installation, Operation and Maintenance documents Test 2: All technical documents shall be in English language both in CD- ROM and in hard copy. To be provided by PIA along with first BLOCK AT offered for the package

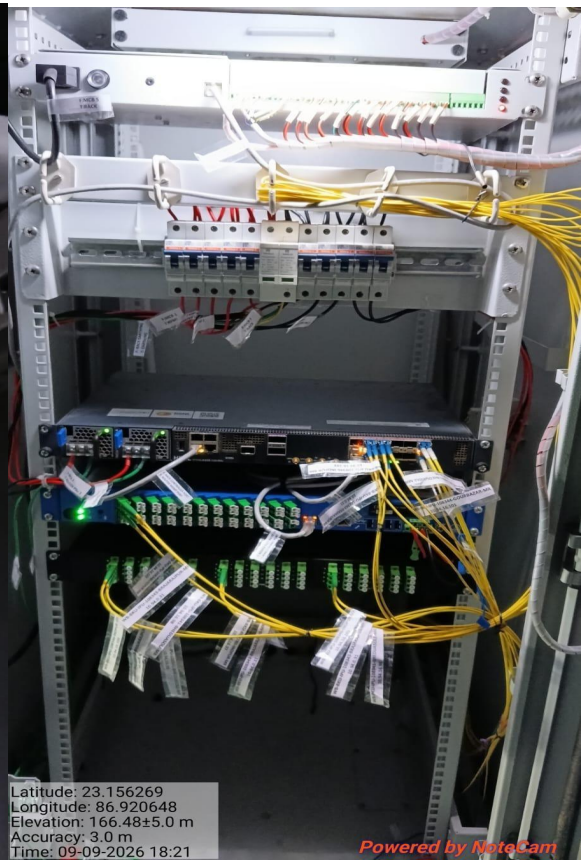
3. Acceptance Testing Test Cases

3.1 TEST CASES FOR BLOCK RACK:

Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-1	Sec-IV-C, Anx-B (VI.1)	Outdoor/Indoor enclosure for DC Power Plant/AC UPS and Other Network Equipment	Check both network and power supply including battery with partitions for power, battery bank and network devices are placed in single enclosure.	To be checked Physically as per approved Rack Layout Plan	All the equipment is arranged as per layout plan	YES	 Rack at Block & GP with DAS (EM

Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-2	Sec-IV-C, Anx-B (VI.2)	Technical Requirement	All enclosure panels are single walled boltable from inside with earthing to be done on all at parts.	Earthing Strip & wires should be properly fixed with all the equipment.	Earthing is connected for all the equipment	YES	

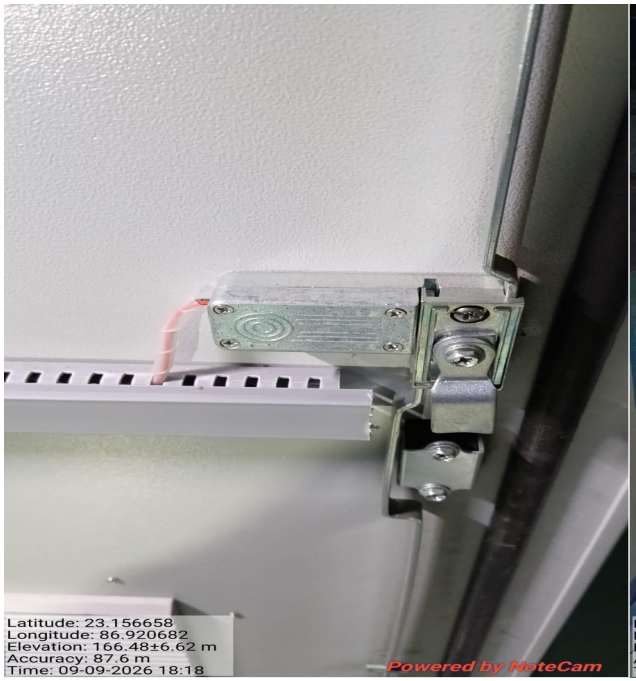




Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-3	Sec-IV-C, Anx-B (VI.3)	Enclosure Frame Material:	Zinc magnesium coating with 25mm system punching in the roof and base frame plus vertical sections with two mounting levels, rolled out of a single sheet,	To be checked Physically and OEM QA Certificate to be taken for material	Cross checked with OEM QA certificate	YES	 Rack at Block & GP with DAS (EM

Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-4	Sec-IV-C, Anx-B (VI.4)	Enclosure Flat Parts Material:	Galvanized sheet steel 1.5mm/2mm thick of 120GSM/	OEM QA Certificate to be taken	Cross checked with OEM QA certificate	YES	 Rack at Block & GP with DAS (EM

Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-5	Sec-IV-C, Anx-B (VI.4)	Enclosure Flat Parts Material:	Front single door with 4-point locking system and rear panel boltable from inside in single walled construction with door stay, Side panels left and right in single walled construction boltable from inside,	To be checked Physically	Locking system and door arrangement checked	YES	

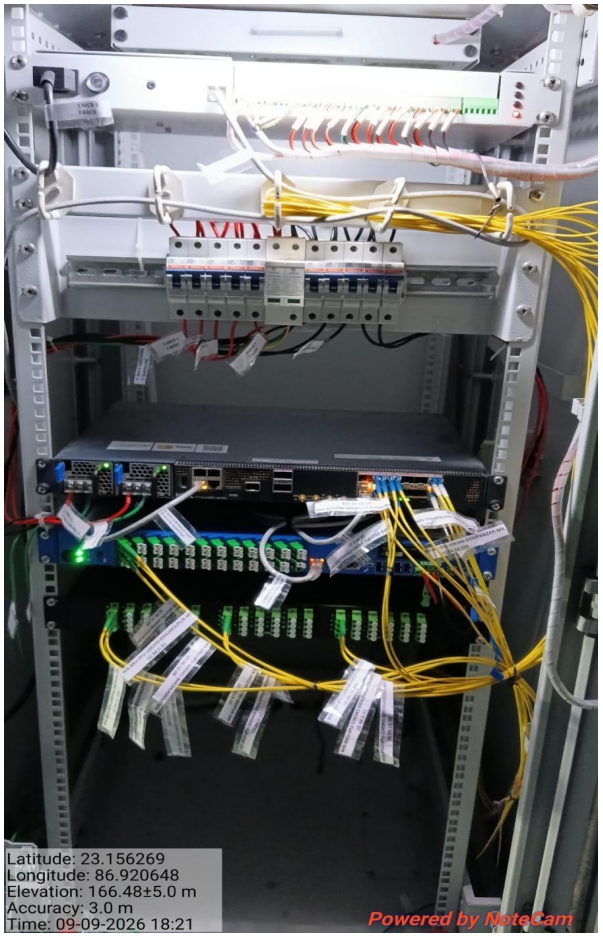




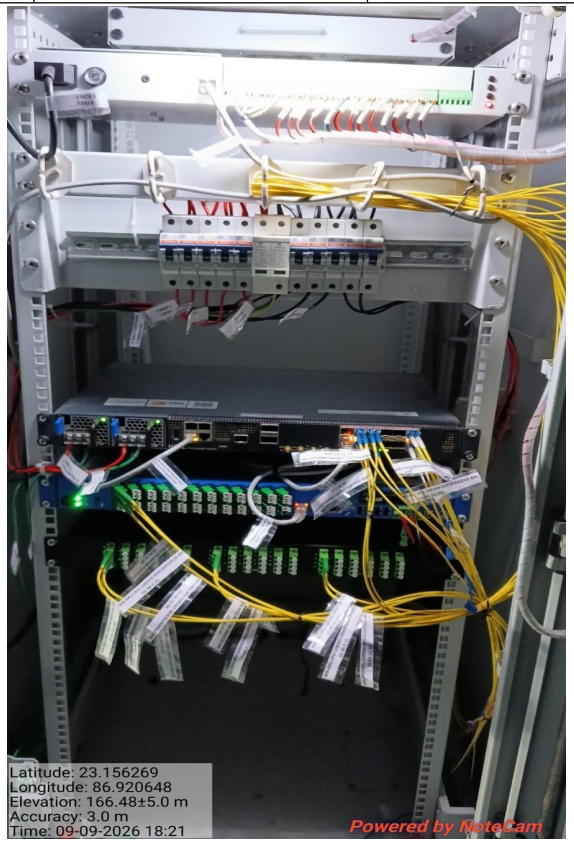
Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-6	Sec-IV-C, Anx-B (VI.4)	Enclosure Flat Parts Material:	Rain canopy of 75mm height with projection all around, with 300mm base plinth of 3mm thick,	OEM QA Certificate to be taken	Cross checked with OEM QA certificate	YES	 Rack at Block & GP with DAS (EM

Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-7	Sec-IV-C, Anx-B (VI.4)	Enclosure Flat Parts Material:	The enclosure flat parts to be gasketed with Outdoor Polyurethane foam gasket, the fasteners will be of SS304 grade suitable for outdoor application.	OEM QA Certificate to be taken	Physically checked & OEM QA certificate collected	YES	 Rack at Block & GP with DAS (EM

Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-8	Sec-IV-C, Anx-B (VI.5)	Dimension:	Provision for minimum 20% additional space for future expansion.	To be checked Physically	Physically checked	YES	



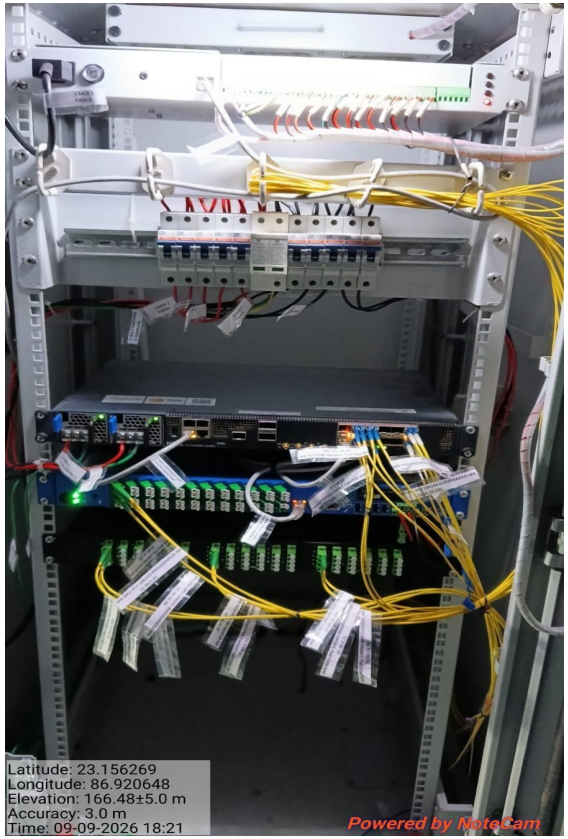
Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-9	Sec-IV-B, SCC, 3.9(i)	Mini OLT Space provisioning	1U Space to be available in rack for future OLT provisioning and power to the OLT to be tapped from the Power System being procured at the GP location.	Space and power provisioning to be checked Physically.	Physically checked	YES	





Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-10	Sec-IV-C, Anx-B (VI.6)	Cooling:	The housing should be equipped with DC/AC operated cooling Axial Fans, self-starting, double ball-bearing, temperature-controlled operation via controller.	To be checked Physically and required OEM QA certificate for fan & controller functionality.	Physically checked & OEM QA certificate collected	YES	Rack at Block & GP with DAS (EM



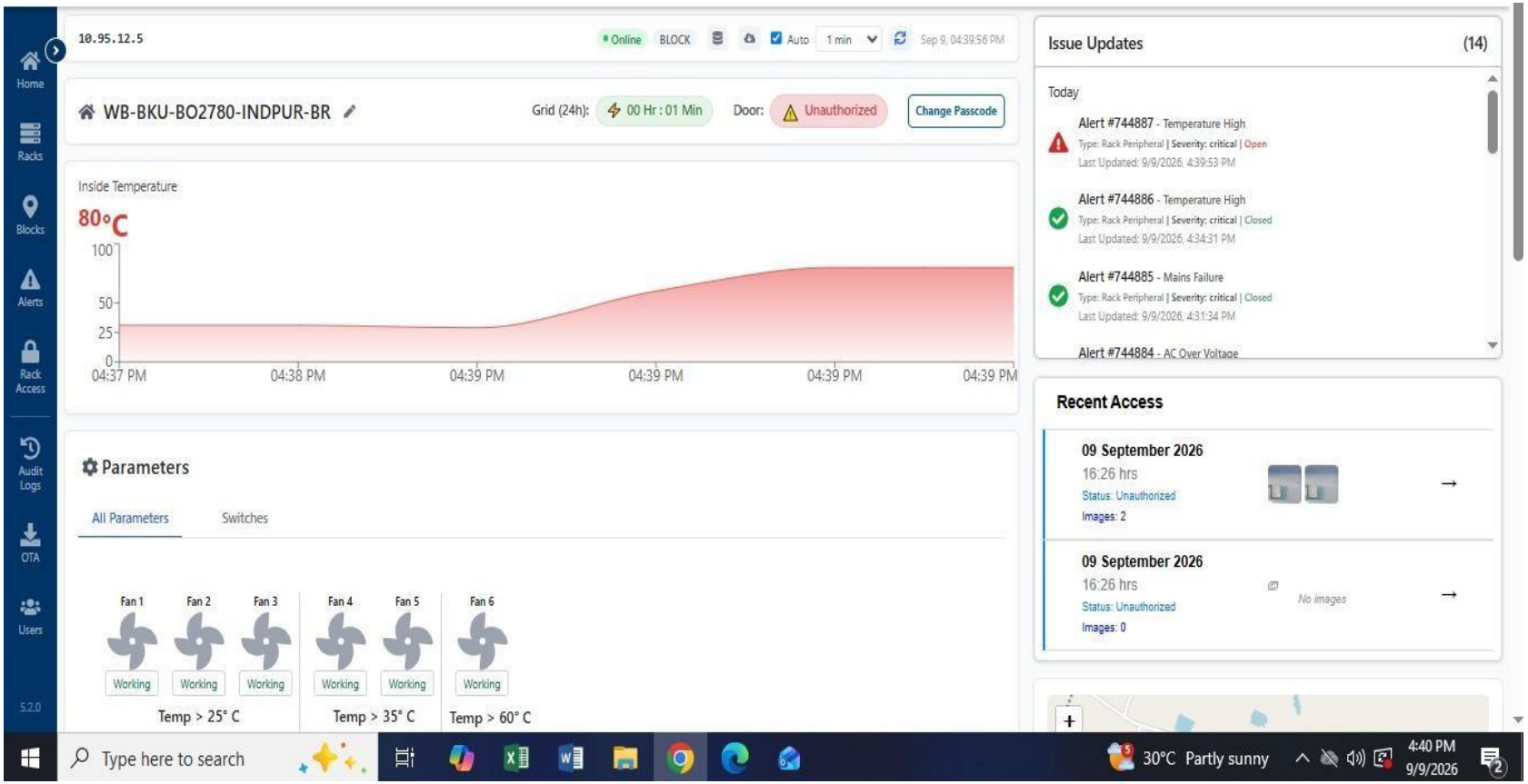


Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-11	Sec-IV-C, Anx-B (VI.6)	Cooling:	Noise level maximum 65dB.	To be checked with Sound Level Meter	Noise is in the limit		

Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-12	Sec-IV-C, Anx-B (VI.6)	Cooling:	The cooling fans should be on a fan tray for ease of access and easy fault identification and diagnosis.	Accessibility to be checked Physically and Parameters to be checked at SNOC	Checked physically and through SNOC	YES	



Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-13	Sec-IV-C, Anx-B (VI.6)	Cooling:	N+1 Configuration fans.	To be checked Physically	Redundant fan available	YES	



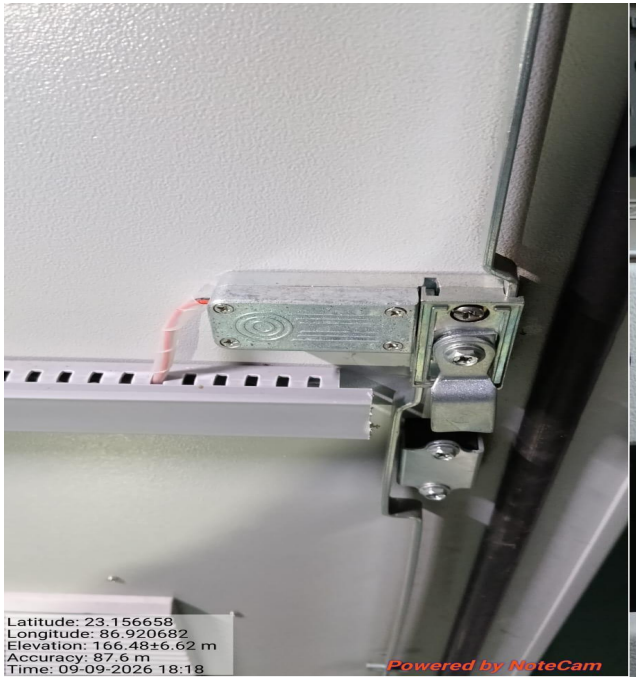
Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-14	Sec-IV-C, Anx-B (VI.6)	Cooling:	The enclosure should have provision to mount Outlet filters:	To be checked Physically	Physically checked	YES	

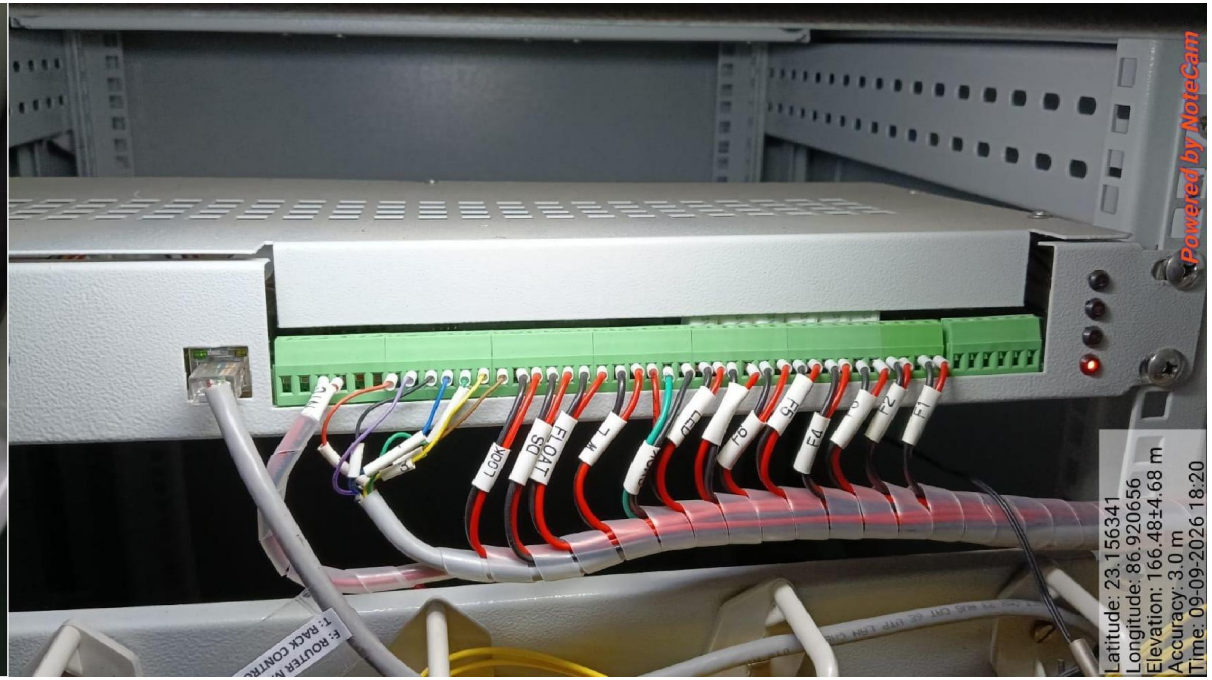


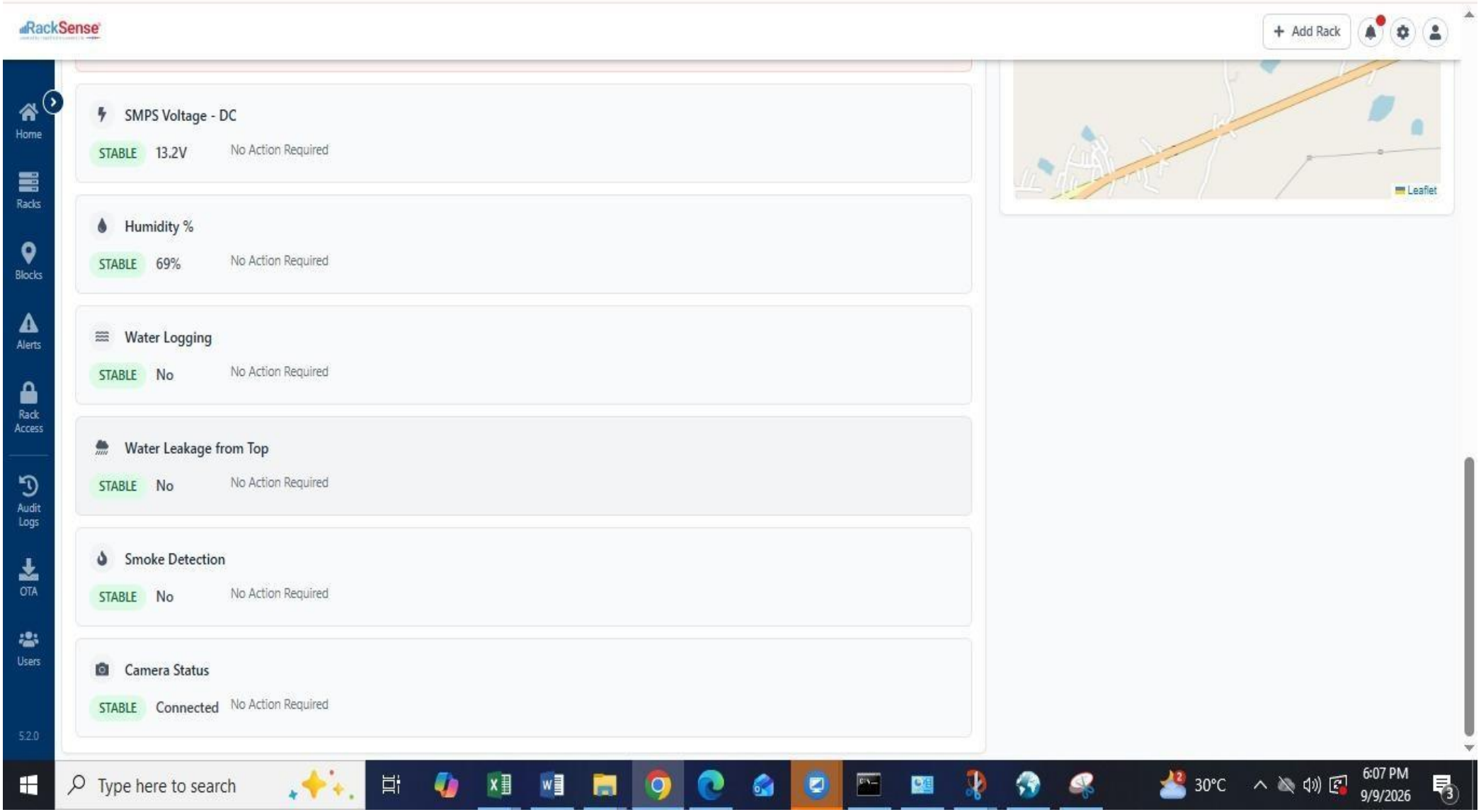
Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-15	Sec-IV-C, Anx-B (VI.6)	Cooling:	Material: ABS/PU, For ventilation by convection size and capacity as per heat load requirement.	OEM QA Certificate to be taken	Cross checked with OEM QA certificate	YES	Rack at Block & GP with DAS (EM

Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-16	Sec-IV-C, Anx-B (VI.8)	Surface Finishing:	Powder coated with UV Resistant pure polyester RAL7035 Matt super durable with painting thickness of 80 to 120 microns minimum.	OEM QA Certificate to be taken	Cross checked with OEM QA certificate	YES	Rack at Block & GP with DAS (EM

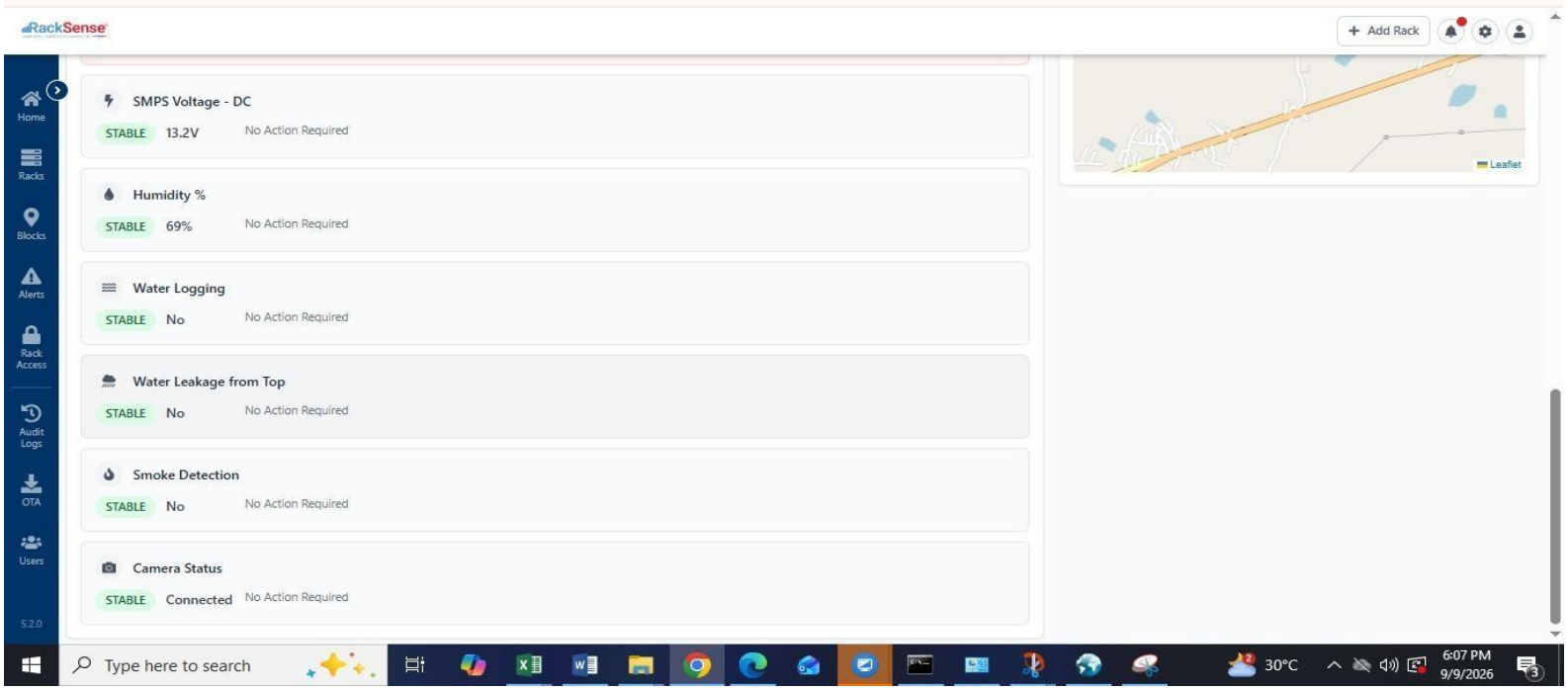
Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-17	Sec-IV-C, Anx-B (VI.9)	Access Control and Monitoring System:	Electromagnetic spring loaded metal lock with 9-digit electronic keypad reader for front door with IP/SNMP/Web browser based control and monitoring to SNOC along with temperature, humidity, water logging, fan fail, water leakage from top, Fire detection, door open/unauthorized access monitoring to manage the SLA, Enclosure, Fan and Filter, locking and Monitoring system should be from the same OEM.	Availability of lock to be checked Physically and Parameters to be checked at SNOC	Checked physically and through SNOC	YES	


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Accuracy: 87.6 m
Time: 09-09-2026 18:18
Powered by NoteCam


Powered by NoteCam
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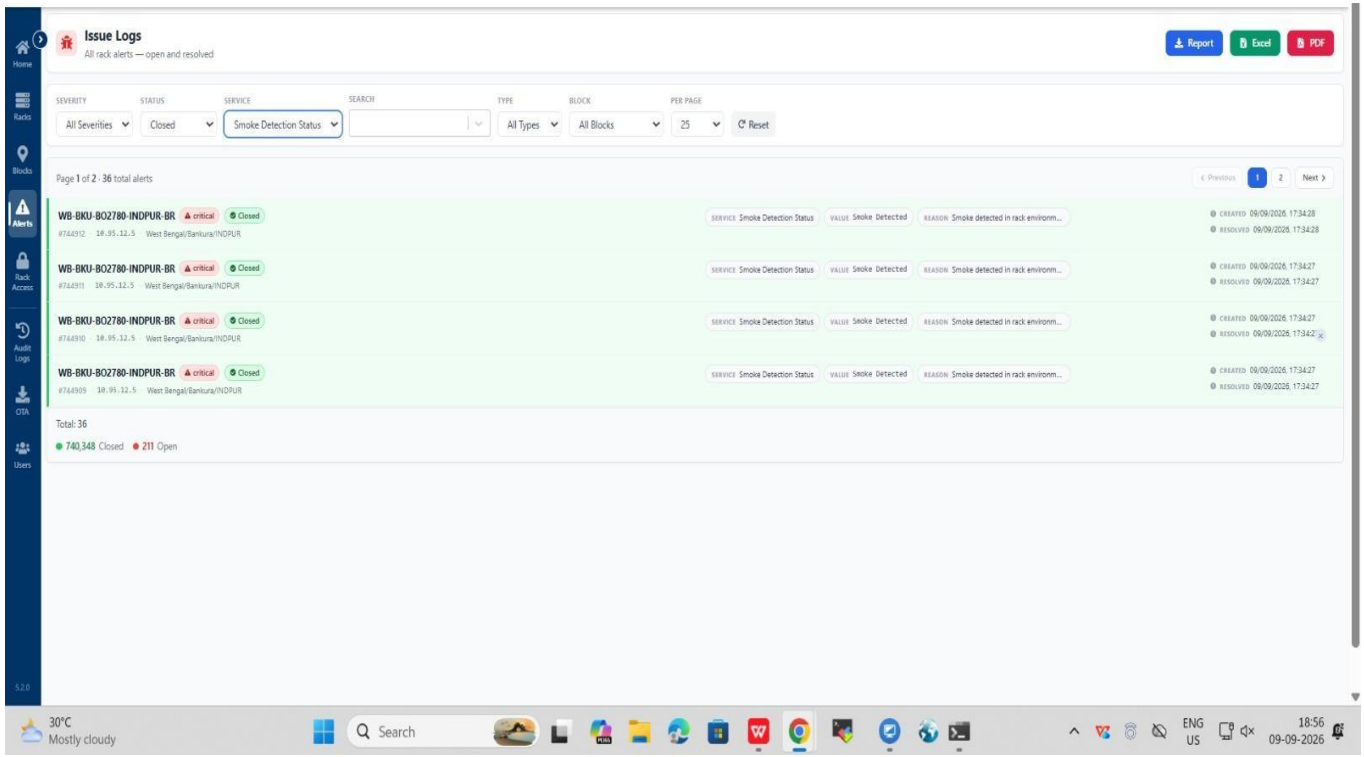

RackSense
+ Add Rack
Home
Racks
Blocks
Alerts
Rack Access
Audit Logs
OTA
Users
5.2.0
SMPS Voltage - DC
STABLE 13.2V No Action Required
Humidity %
STABLE 69% No Action Required
Water Logging
STABLE No No Action Required
Water Leakage from Top
STABLE No No Action Required
Smoke Detection
STABLE No No Action Required
Camera Status
STABLE Connected No Action Required
Leaflet
Type here to search
30°C
6:07 PM
9/9/2026

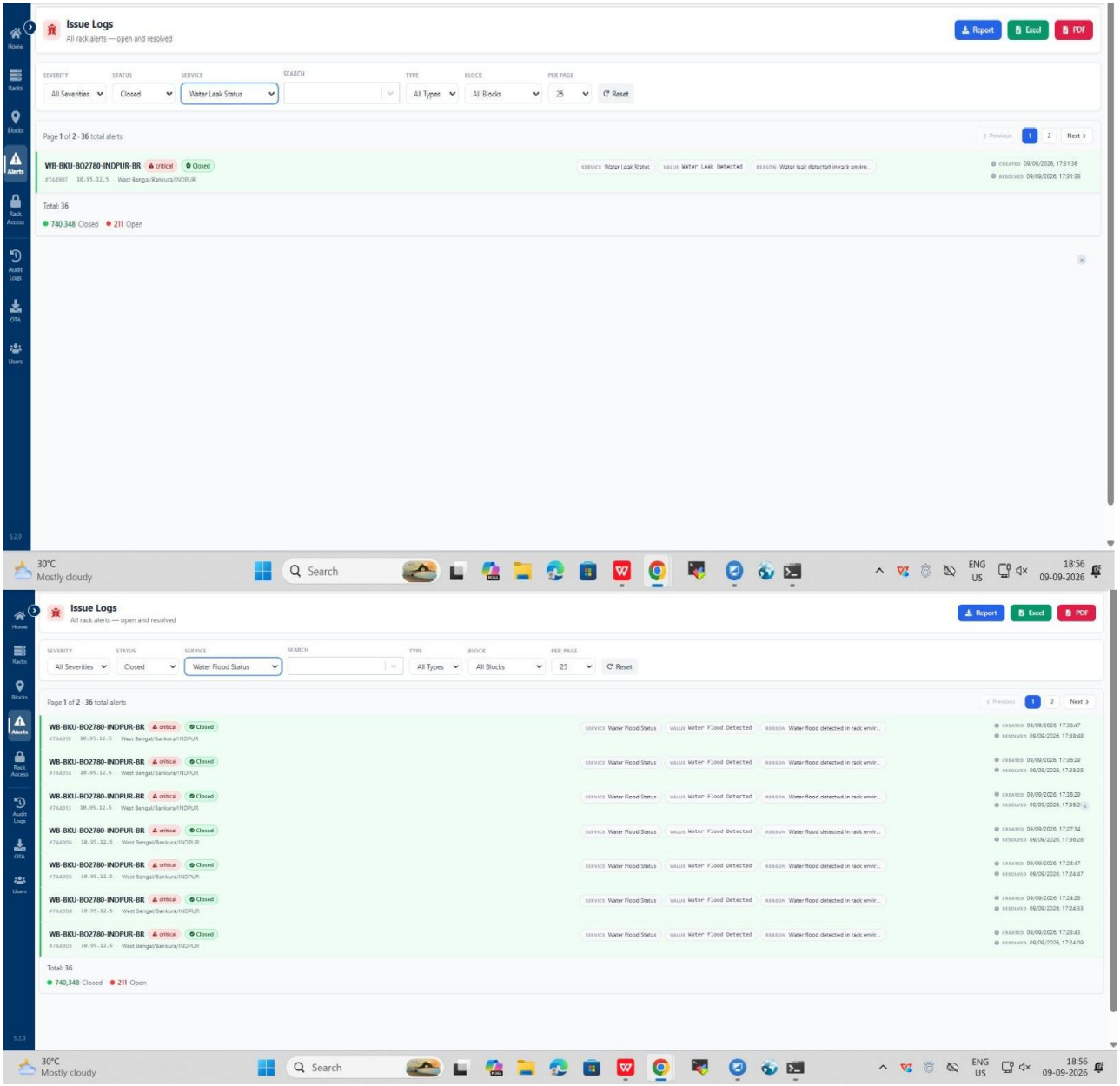
Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-18	Sec-IV-C, Anx-B (VI.9)	Access Control and Monitoring System:	Monitoring of major parameters including Input & Output Voltages, Inside & Outside Temperature, Humidity, Alarms, %battery backup time left.	To be Checked at SNOC	Checked at SNOC	YES	

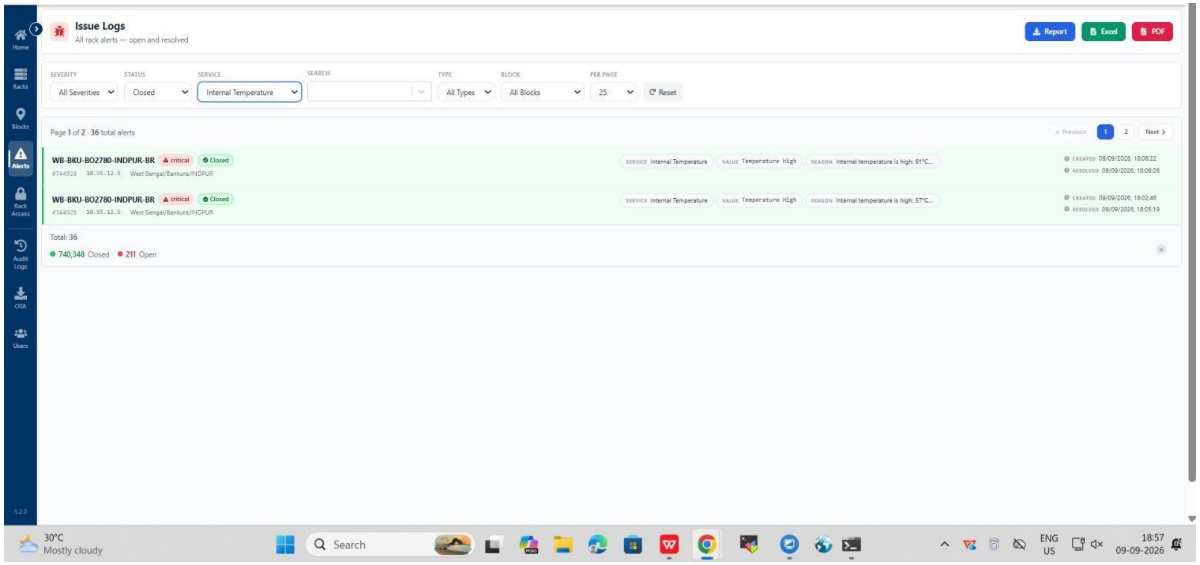


Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-19	Sec-IV-C, Anx-B (VI.9)	Access Control and Monitoring System:	Control/switch on/off Non-Critical Loads/Extra fans. The monitor & Control should be possible from SNOC.	To be Checked at SNOC	Checked at SNOC	YES	

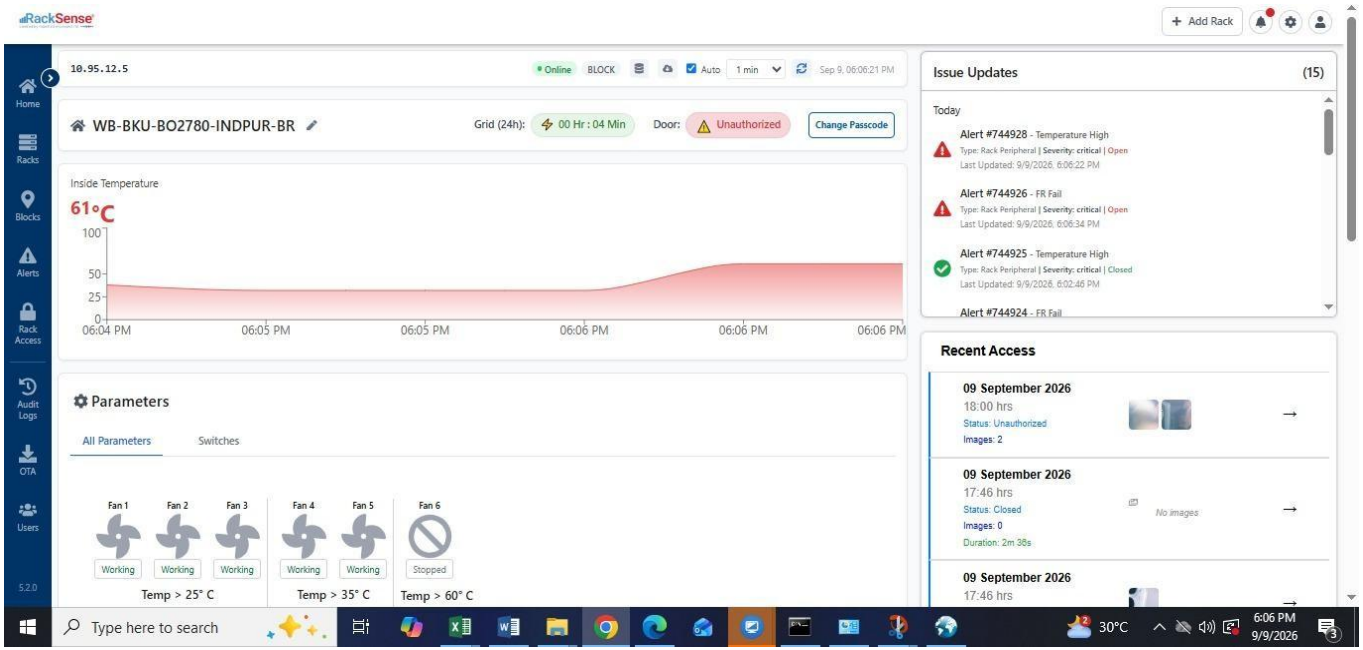
Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-20	Sec-IV-C, Anx-B (VI.9)	Access Control and Monitoring System:	Last 24hrs (at least) Alarm & Access events must be stored with Date & Time stamp.	SNOC Report to be provided by PIA	SNOC report collected	YES	

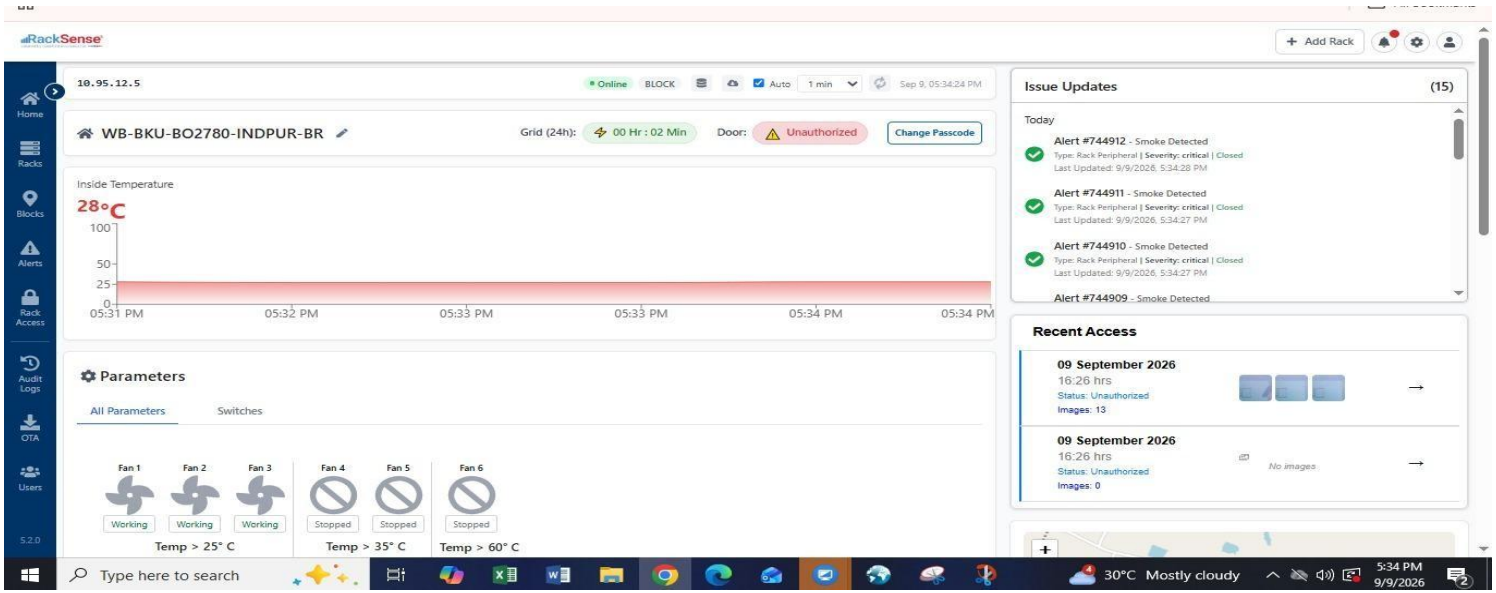



Issue Logs
All rack alerts — open and resolved
Report
Excel
PDF
Water Leak Status
WB-BKU-BO2780-INDPUR-BR
Total: 36
740,348 Closed
211 Open
Issue Logs
All rack alerts — open and resolved
Water Flood Status
WB-BKU-BO2780-INDPUR-BR
Total: 36
740,348 Closed
211 Open

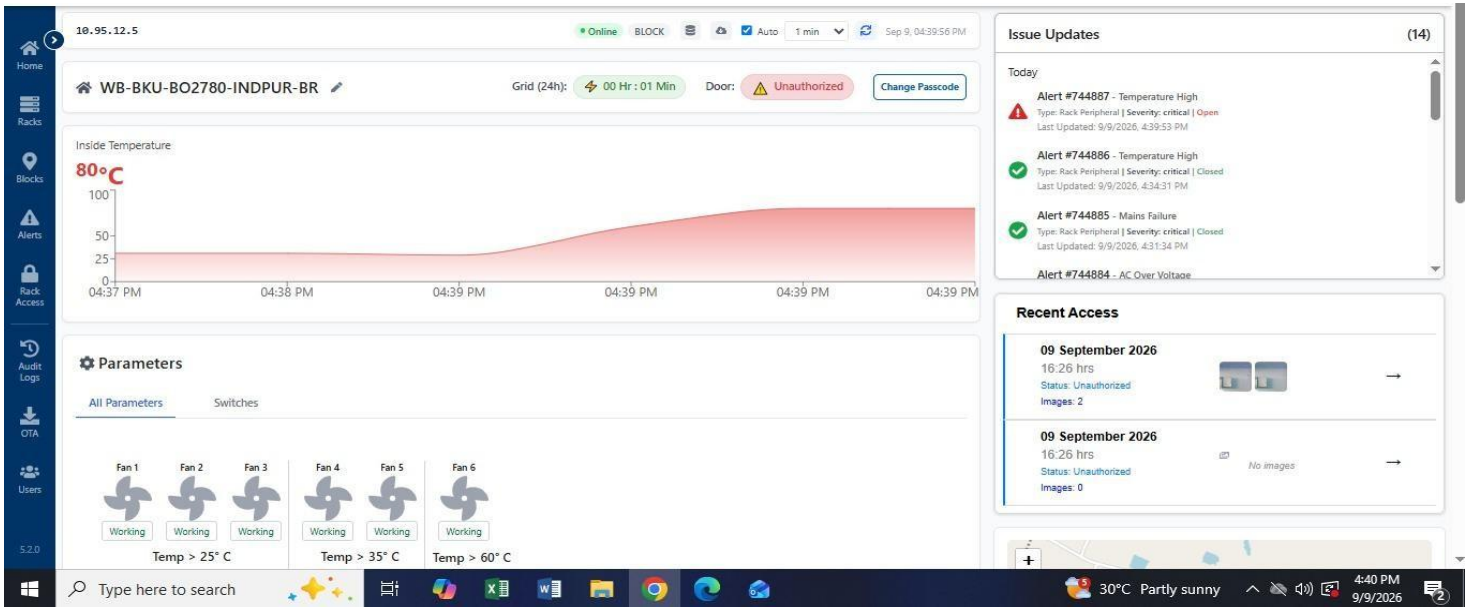

Issue Logs
All rack alerts — open and resolved
Report
Excel
PDF
SEVERITY
All Severities
STATUS
Closed
SERVICE
Internal Temperature
SEARCH
TYPE
All Types
BLOCK
All Blocks
PER PAGE
25
Reset
Page 1 of 2 · 36 total alerts
Previous
1
2
Next
WB-BKU-BO2780-INDPUR-BR
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Closed
#744928 10.95.12.5 West Bengal/Bankura/INDPUR
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WB-BKU-BO2780-INDPUR-BR
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Closed
#744925 10.95.12.5 West Bengal/Bankura/INDPUR
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REASON Internal temperature is high: 57°C...
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740,348 Closed
211 Open
Home
Racks
Blocks
Alerts
Rack Access
Audit Logs
OTA
Users
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30°C
Mostly cloudy
Search
ENG
US
18:57
09-09-2026

Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-21	Sec-IV-C, Anx-B (VI.10)	Temperature based fan operation	The fans will be in 5+1 configuration and 3 fans will operate when inside temperature is above 25°C, 2 more fans will start operating automatically when inside temperature exceeds 35°C.	Functionality to be checked with external blower	Physically checked	YES	




RackSense
+ Add Rack
10.95.12.5
Online
BLOCK
Auto
1 min
Sep 9, 05:34:24 PM
Home
Racks
Blocks
Alerts
Rack Access
Audit Logs
OTA
Users
5.2.0
WB-BKU-BO2780-INDPUR-BR
Grid (24h):
00 Hr : 02 Min
Door:
Unauthorized
Change Passcode
Inside Temperature
28°C
100
50
25
0
05:31 PM
05:32 PM
05:33 PM
05:33 PM
05:34 PM
05:34 PM
Parameters
All Parameters
Switches
Fan 1
Fan 2
Fan 3
Fan 4
Fan 5
Fan 6
Working
Working
Working
Stopped
Stopped
Stopped
Temp > 25° C
Temp > 35° C
Temp > 60° C
Issue Updates
(15)
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Type: Rack Peripheral | Severity: critical | Closed
Last Updated: 9/9/2026, 5:34:28 PM
Alert #744911 - Smoke Detected
Type: Rack Peripheral | Severity: critical | Closed
Last Updated: 9/9/2026, 5:34:27 PM
Alert #744910 - Smoke Detected
Type: Rack Peripheral | Severity: critical | Closed
Last Updated: 9/9/2026, 5:34:27 PM
Alert #744909 - Smoke Detected
Recent Access
09 September 2026
16:26 hrs
Status: Unauthorized
Images: 13
09 September 2026
16:26 hrs
Status: Unauthorized
Images: 0
No images
Type here to search
30°C Mostly cloudy
5:34 PM
9/9/2026

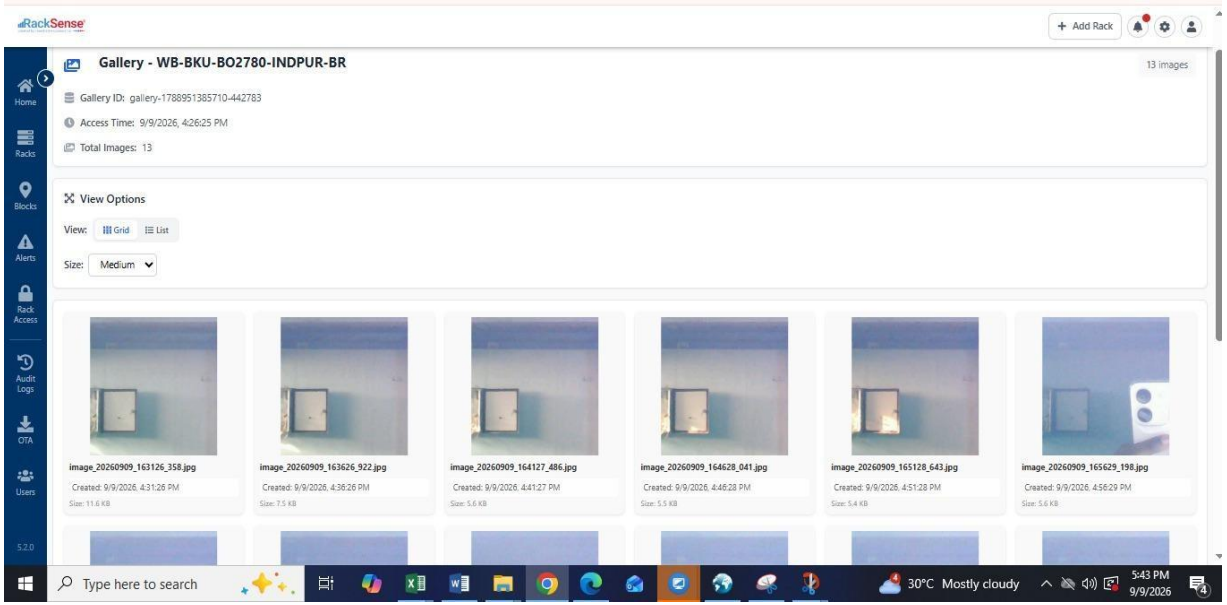
Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-22	Sec-IV-C, Anx-B (VI.10)	Temperature based fan operation	Standby fan operates automatically when inside temperature exceeds 60°C OR any of the fans fails.	Functionality to be checked with external blower	Physically checked	YES	



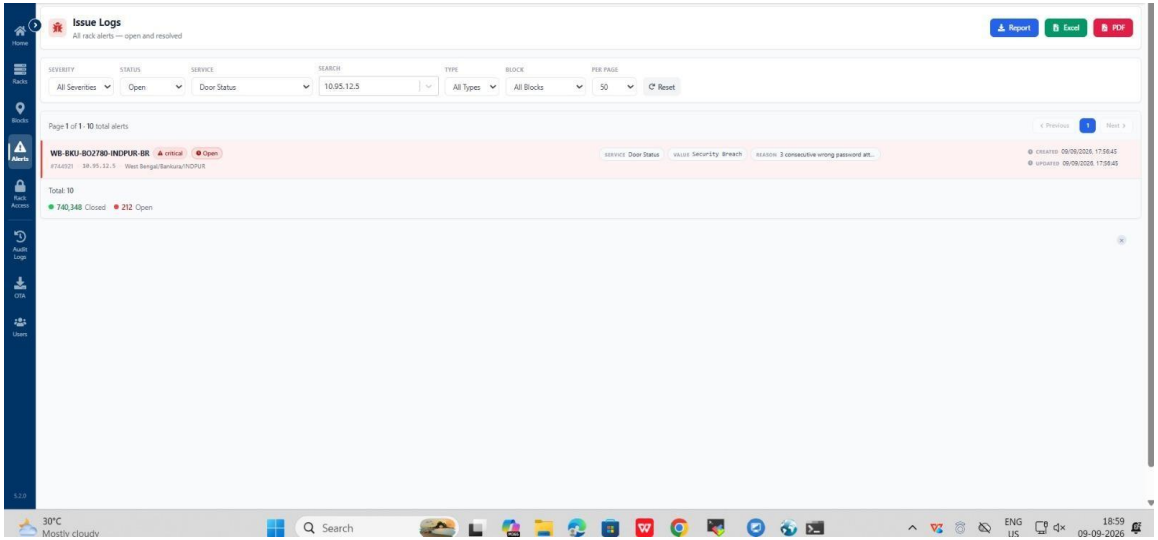
Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-23	Sec-IV-C, Anx-B (VI.11)	Hidden camera	A hidden tamper proof camera available and found in good condition	To be checked Physically	Hidden camera available	YES	



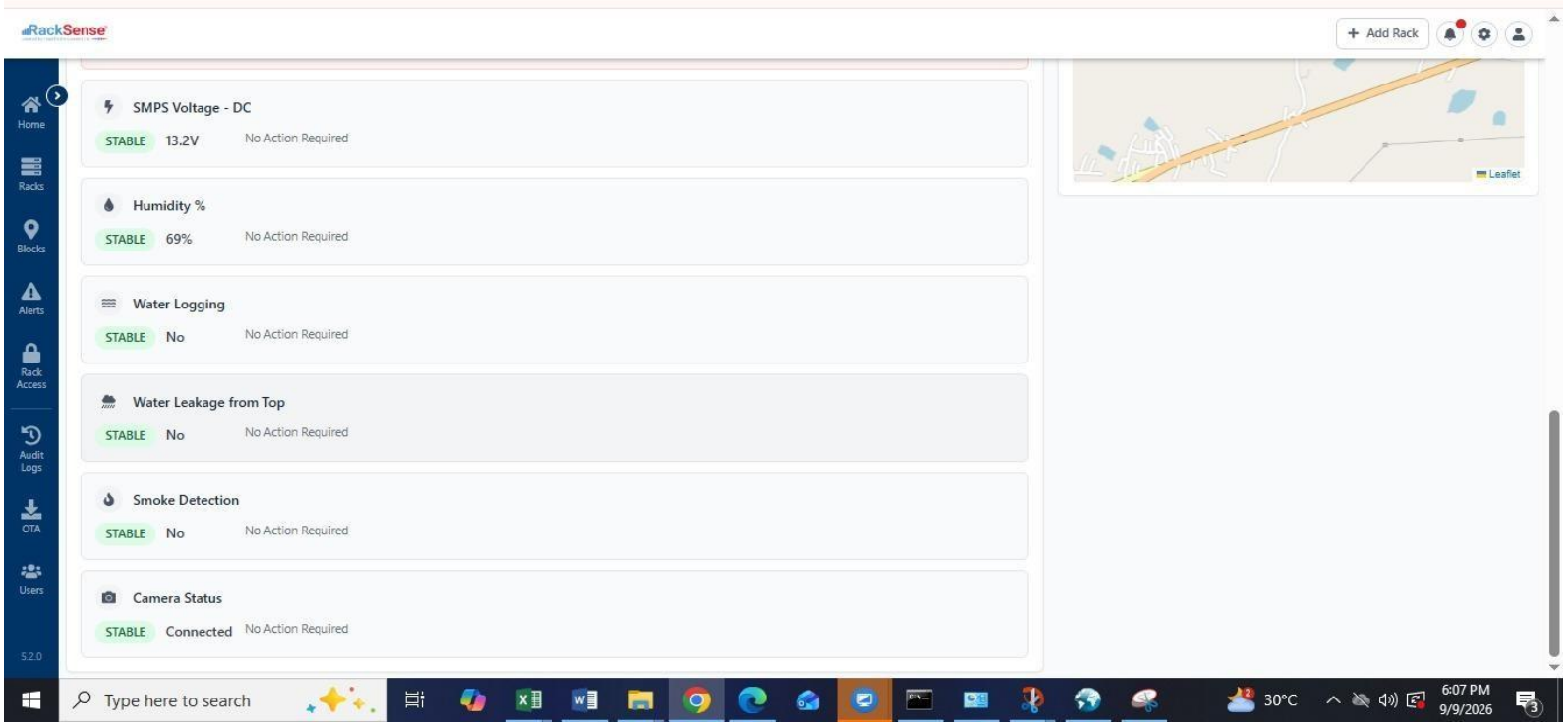
Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-24	Sec-IV-C, Anx-B (VI.11)		Camera will capture a snapshot every time the door is opened and continues to take snapshots at every 5minutes for one hour and there after every 15 minutes until the door is closed and sends the snapshot to SNOC, where it is stored for at least 15days backup.	Functionality to be checked at SNOC.	Functionality checked	YES	



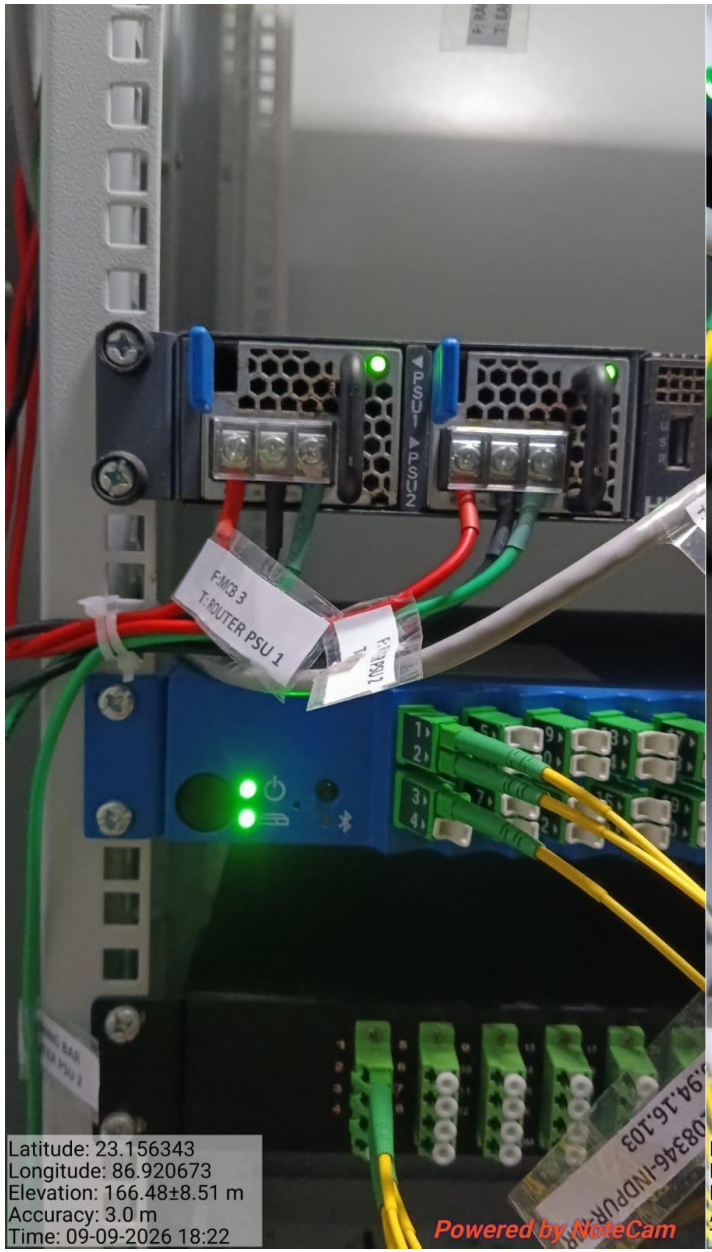
Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-25	Sec-IV-C, Anx-B (VI.12)	Access control system rights and protection	The password for access control system can be remotely reset by a Super User at SNOC. In case of unauthorized access of cabinet or wrong password is entered, a notification will be sent to the SNOC and after three failed attempts, the password will be disabled.	Functionality to be checked at SNOC.	Functionality checked	YES	



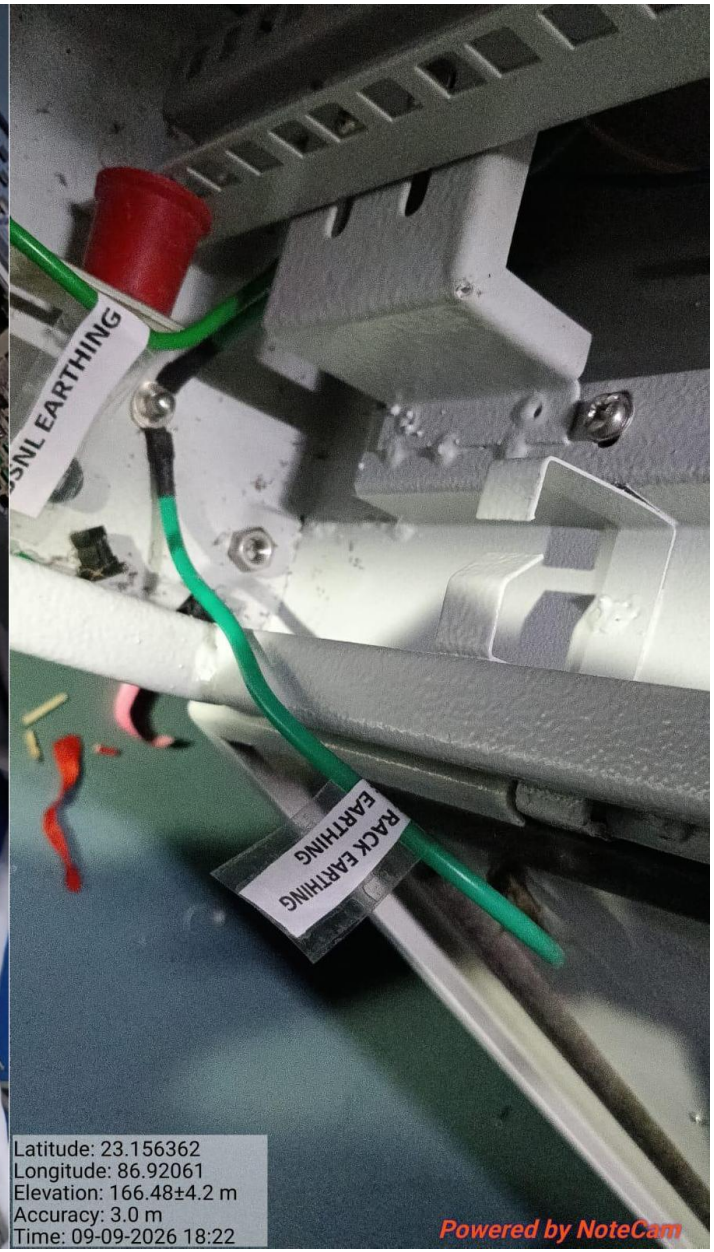
Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-26	Sec-IV-C, Anx-B (VI.13)	eMS for Rack Operations-	The status of all the racks and all the alarms shall be available in the SNOC to be supplied.	Functionality to be checked at SNOC	Functionality checked	YES	



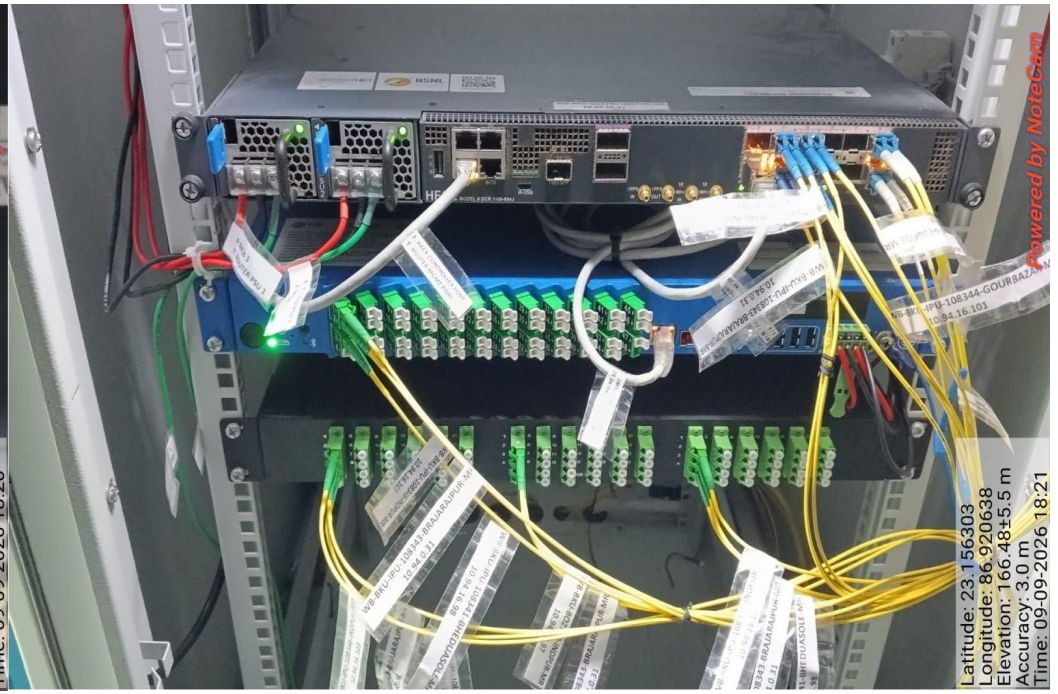
Test Cases	RFP Clause	Test Description	Test Parameters	Test Procedure	Test Result	Compliance (Y/N)	Remarks
T-27	Sec-IV-C, Anx-B (VI.14)	Power Supply	Power supply to the Rack shall be without external ON/OFF switch	Physically checked to disconnect the external power supply.	Rack supply automatically shifted to backup supply without any time delay and equipment shutdown	YES	


F:MCB 3
T: ROUTER PSU 1
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Longitude: 86.920673
Elevation: 166.48±8.51 m
Accuracy: 3.0 m
Time: 09-09-2026 18:22
Powered by NoteCam


F: RACK CONTROLLER PORT
T: ROUTER MGMT PORT
F: ROUTER PORT No:XE 10
T: RFMS ETHERNET PORT
Latitude: 23.156345
Longitude: 86.920681
Elevation: 166.48±8.12 m
Accuracy: 3.0 m
Time: 09-09-2026 18:22
Powered by NoteCam


RACK EARTHING
Latitude: 23.156362
Longitude: 86.92061
Elevation: 166.48±4.2 m
Accuracy: 3.0 m
Time: 09-09-2026 18:22
Powered by NoteCam


HFCL
WB-BKU-BO2780-INDPUR-MR
10.94.16.97
Powered by NoteCam
Latitude: 23.156355
Longitude: 86.920635
Elevation: 166.78±10.2 m
Accuracy: 33.13 m
Time: 09-09-2026 18:20


Powered by NoteCam
Latitude: 23.156303
Longitude: 86.920638
Elevation: 166.48±5.5 m
Accuracy: 3.0 m
Time: 09-09-2026 18:21

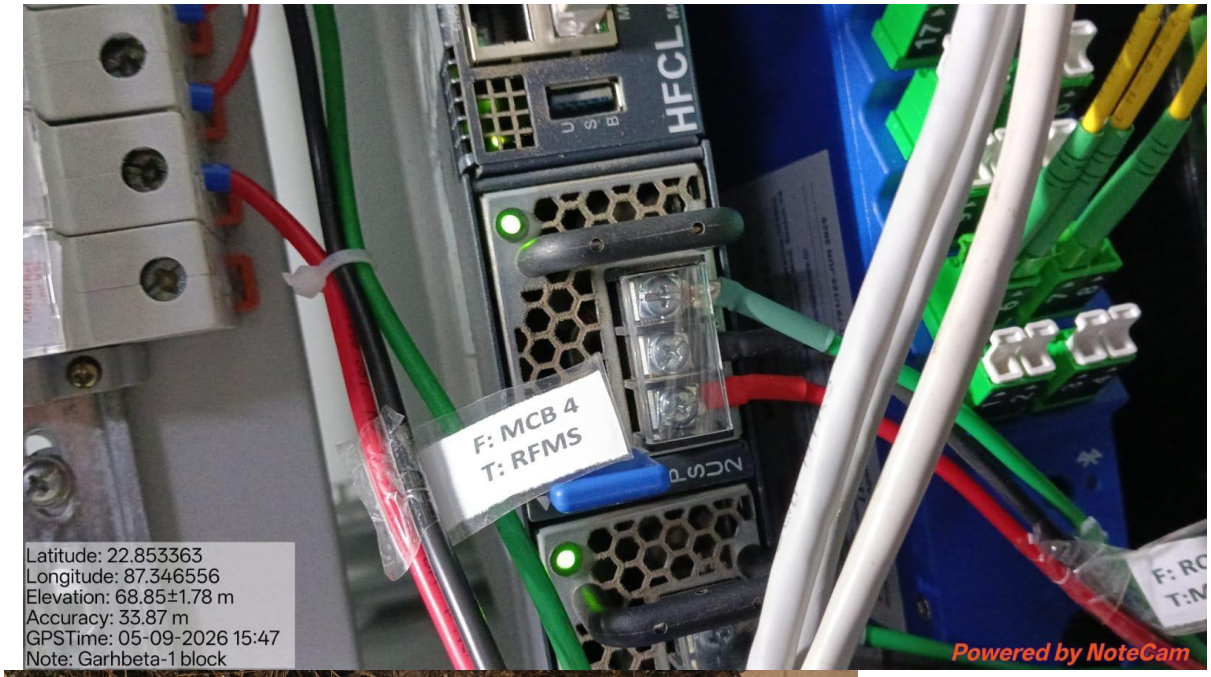

HFCL
WB-BKU-BO2780-INDPUR-MR
10.94.16.97
Powered by NoteCam
Latitude: 23.156355
Longitude: 86.920635
Elevation: 166.78±10.2 m
Accuracy: 33.13 m
Time: 09-09-2026 18:20

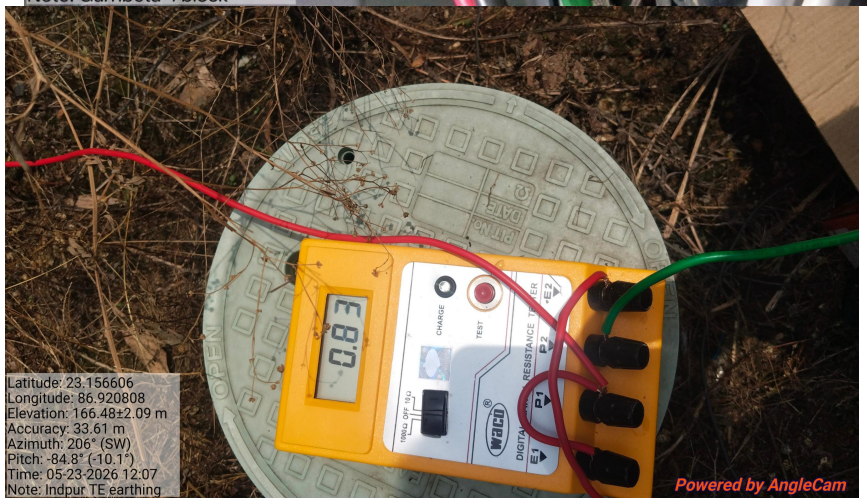

BHARATNET
Managed by BSNL
BSNL
Connecting Bharat
Securely • Affordably • Reliably
BN-BSNL-09-WB-ITIL-S020-XXXX-
Powered by NoteCam
Latitude: 23.156456
Longitude: 86.921285
Elevation: 166.78±10.3 m
Accuracy: 100.0 m
Time: 09-09-2026 18:19


Latitude: 23.156654
Longitude: 86.920732
Elevation: 166.48±6.7 m
Accuracy: 77.6 m
Time: 09-09-2026 18:18
Powered by NoteCam


Latitude: 23.156658
Longitude: 86.920682
Elevation: 166.48±6.62 m
Accuracy: 87.6 m
Time: 09-09-2026 18:18
Powered by NoteCam


BN-BSNL-09-WB-ITIL-S014-XXXX-
MECLBLRACK11020250000040
BSNL
Manifold e -Connect Limited
2025-26; Serial No.: 40
: MeCL-DAS-R-BL-001
: Rack at Block
: Available
: TSEC/NCR/B/RABGP/110.JUN 2025
: 05.06.2025
Latitude: 23.15634
Longitude: 86.920656
Elevation: 166.48±8.22 m
Accuracy: 3.0 m
Time: 09-09-2026 18:20
Powered by NoteCam


HFCL
F: MCB 4
T: RFMS
Latitude: 22.853363
Longitude: 87.346556
Elevation: 68.85±1.78 m
Accuracy: 33.87 m
GPSTime: 05-09-2026 15:47
Note: Garhbeta-1 block
Powered by NoteCam


Latitude: 23.156606
Longitude: 86.920808
Elevation: 166.48±2.09 m
Accuracy: 33.61 m
Azimuth: 206° (SW)
Pitch: -84.8° (-10.1°)
Time: 05-23-2026 12:07
Note: Indpur TE earthing
Powered by AngleCam