

अंतर्राष्ट्रीय ऑटोमोटिव प्रौद्योगिकी केन्द्र  
INTERNATIONAL CENTRE FOR AUTOMOTIVE TECHNOLOGY  
[A Division of NATRiP Implementation Society (NATIS), Govt. of India]

**TEST REPORT**

Non-Transferable

Test Report No. :

C T O G R 8 5 3 5

Date: 25.05.2022

1. NAME AND ADDRESS OF THE CUSTOMER  
M/s iTriangle Infotech Pvt. Ltd.  
# 803/A (803/A-1-3), 76th 'A' Cross, West of Chord Road, 6<sup>th</sup> Block Rajaji Nagar, Bengaluru, Karnataka-560010
2. NAME AND ADDRESS OF THE MANUFACTURER  
M/s Tecno Systems India Electronics Pvt. Ltd.  
Khata No. 229/195/A, Marsur, Kasaba hobli, Anekal Taluk, Bengaluru, Karnataka, 562106 India

3. DESCRIPTION OF DEVICE UNDER TEST (DUT)

ATD (Automatic Tracking Device)	Emergency Button
Model Name/No.: aQuila Bharat101 with IRNSS	Model Name/No.: aQuila_SOS
Part No: ITR-BH-0020-3-1	Part No: ITR-PB-0029
Drawing No.: ITR-DR-BH-0021	Drawing No.: ITR-DWG-PB-0029
GSM/GPRS Make/Module: Teratorns-TT02-01	
GNSS/GPS Make/Module: TT03-00 (GPS + IRNSS)	
Accelerometer & Gyroscope Make/Module: STMicroelectronics LSM6DSL	
Voltage System: 12V & 24V	
e-Sim chip Make/ e-Sim Integrator/ Network Profile:	IDEMIA / Vodafone UICC eSim/ Vodafone & BSNL vide Test Report No. CT6GQ8527 Dated 31.05.2021
	IDEMIA /Taisys/ Airtel & BSNL vide Test Report No. CT5GQ8523 dated 13.04.2021
	Infineon / Sensorise/Idea & BSNL vide Test Report No. CT0GN0035 dated 31.01.2018
Firmware Version/Software Version: 1_36T02B0164MAIS_6/1_36T02B0164MAIS_6	
TAC Reference No. / Report Reference No. : CL8520 dated 03.06.2020 / CT6GQ8527 Dated 31.05.2021	

4. DATE OF RECEIPT OF SAMPLE (DUT) NA
5. CONDITION OF SAMPLE(s) NA
6. TEST OBJECTIVE  
To carry out the tests on mentioned in Sr. No. 3 above as per IS 16833 Annexure A, Amendment 2 (July 2020).
7. TEST METHOD  
As per IS 16833 Annexure A, Amendment 2 (July 2020).
8. FUNCTIONAL VERIFICATION: NA
9. CONCLUSION  
DUT as mentioned in Sr. No. 3 above has been already approved as per AIS 140 amended up to December 2018. Tests mentioned as per requirements of IS 16833 Annexure A, Amendment 2 (July 2020) are similar to AIS 140 (Amd-2), so the test report can be issued as per IS 16833 Annexure A, Amendment 2 (July 2020).
10. TEST DESCRIPTION AND DATE OF PERFORMANCE OF TEST: NA  
**Note:** This Report should be read along with Test Report No. CT0GN0035 dated 31.01.2018, CT1GN0371 dated 11.12.2018, CT2GP8014 dated 30.01.2020, CT3GP8066 dated 03.06.2020, CT4GQ8503 dated 21.01.2021, CT5GQ8523 dated 13.04.2021, CT6GQ8527 Dated 31.05.2021

**Disclaimer**  
This test report pertains only to the test samples / components / parts / assemblies / gensets/ materials /fuels/chemicals/engines/vehicles/Agr. Tractors etc. actually tested /witnessed / verified by ICAT in the presented condition based on the documents / information produced / submitted by the customer. The issuance of this test report alone does not indicate any measure of approval, certification, supervision, COP, control of quality surveillance by ICAT of the test samples / items/ components. No extract, abridgment or abstraction from this test report may be published or used to advertise the product without the written consent of the Director, ICAT, who reserves the absolute right to agree or reject all or any of the details of any items of publicity for which consent may be sought. ICAT is in no way responsible for any misuse or copying of any design in connection with entire vehicle / components / systems and assemblies. Breach of any statutory provisions, of Indian laws or laws of other countries, will be sole responsibility of the customer. ICAT shall not be liable for any claims or damages made by the customer, whatsoever. The customer shall alone be liable for the same and undertakes to indemnify ICAT in this regard. Further, ICAT has the right to initiate cancellation / withdrawal of the certificate / report issued, in case of any fraud, misrepresentation, when it comes to the knowledge of ICAT. The appropriate local court at Gurgaon shall have the jurisdiction in respect of any dispute, claim or liability arising out of this report.

Prepared By	Checked By	Approved By
		
SONIA NAIN Deputy Manager	SONU KR SUDRANIA Manager	MADHUSUDAN JOSHI Dy. General Manager

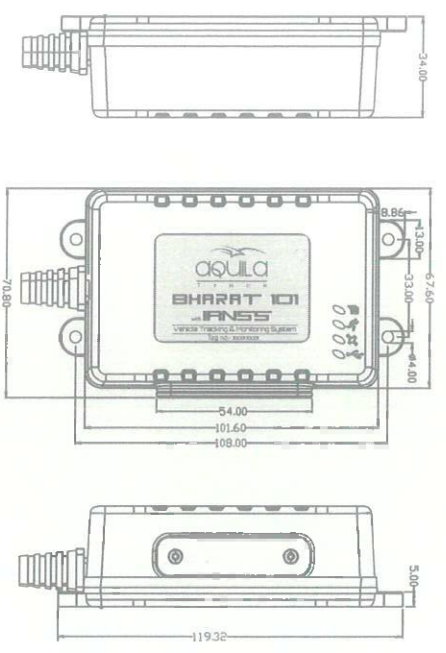
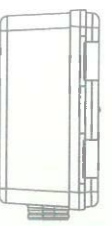




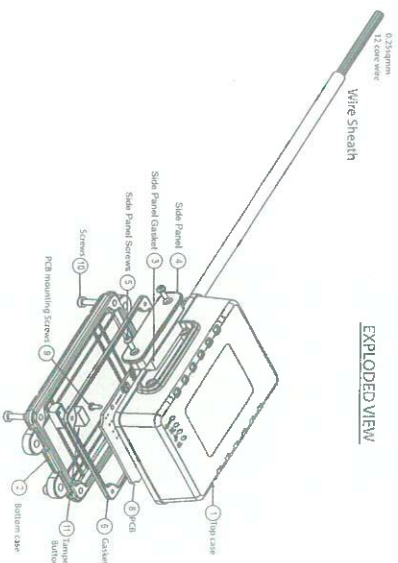
Page 1 of 1  
+  
Drawings- 2 Nos.  
[158673]

Est Report No. ITR-DR-05.05.2022

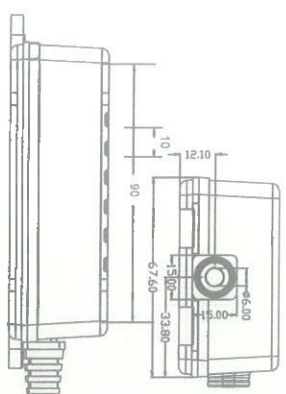
REV	DATE	DESCRIPTION	INITIATED BY	Recommended Tightening Torque (Nm)
01	14-01-21	Initial Release	Rajesh K	Particular
02	24-02-21	Updating the critical dimensions	Rajesh K	Casing assembly
03	12-04-21	Updating Part no & name	Rajesh K	Device mounting



Product Sticker



EXPLODED VIEW



12 Pin Connector

Male  
Wire Gauge: 0.25 sq mm  
Device Wiring Harness with 12 Pin Male

Manufacturer: ITT  
Male Conn Part No: TTP012-MN  
Terminal Part No: TT-1526 (0.2-0.5mm)  
Terminal Part No: TT-1511 (0.75-1.5mm)  
Mating female Part No: TTP012-FN  
Terminal Part No: TT-1525 (0.2-0.5mm)  
Terminal Part No: TT-1524 (0.75-1.5mm)

Bill of Material

S/No	Description	Qty	Material
1	Top Case	1No.	Nylon 30% gf
2	Bottom Case	1No.	Nylon 30% gf
3	Side Panel Gasket	1No.	TPE
4	Side Panel	1No.	Nylon 30% gf
5	Side Panel Mounting screws M2.5x5mm	2No	SS
6	Gasket	1No.	TPE
7	Device Wiring Harness with 12 Pin Male Connector 0.55x4mm, 150mm (TTP012-MN)	1No.	-
8	PCB	1No.	-
9	PCB Mounting Screws M2x6mm	3No	SS
10	Screws - M3 x 20mm 5.5mm Head	4No	SS
11	Jammer Button	1No.	TPE
12	PCB Mounting plastic snapfit screw M2	1No.	Nylon

- NOTE:
1. Unless otherwise specified all dimensions are in mm
  2. View of connectors are shown from Cable entry side
  3. Tolerance of +/-0.8mm should be considered.
  4. Red color highlight are the critical dimension to be measured

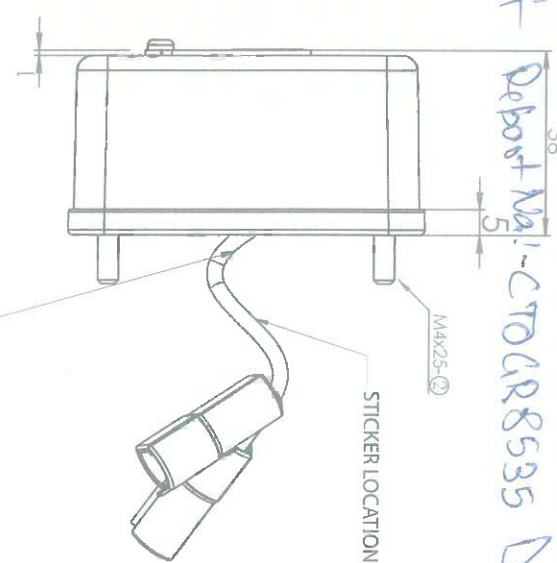
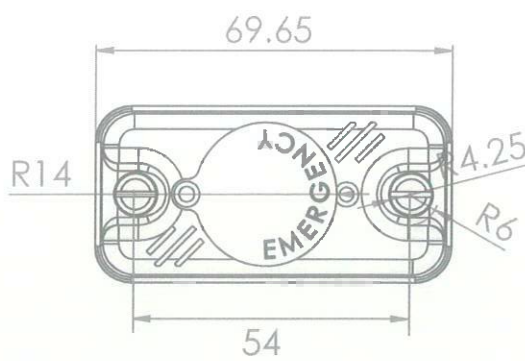
MATERIAL: Nylon 30% gf  
Colour: Grey

DRAWN BY	SIGNATURE
RAJESH K	
CHECKED BY	SIGNATURE
PAVAN NAIK	
DESIGNED BY	SIGNATURE
MINAK N	

aQuila Bharat101 with IRNSS	
SIZE	Part Number
A3	ITR-BH-0020-3-1
SCALE	Drawing Number
5:1	ITR-DR-BH-0021
WEIGHT(G)	REV
- 206 g	WAH
	03



Test Report No: - CT06R8535 Date: - 25.05.2019



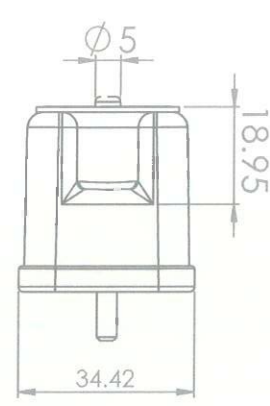
COVERED WITH HEAT SHRINK SLEEVE FOR ENTIRE LENGTH

### PRODUCT SPECIFICATION

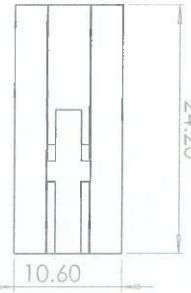
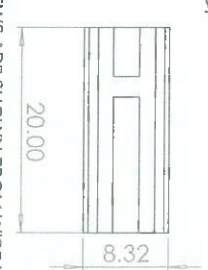
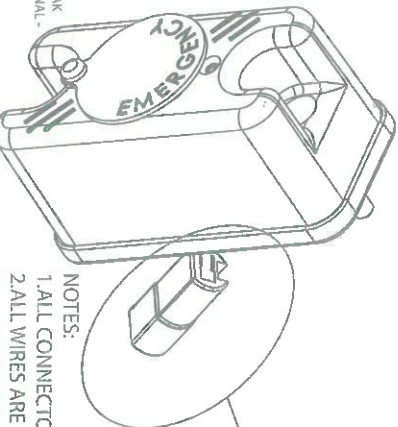
1	SWITCH TYPE	1 NC
2	RATED VOLTAGE	8-36 V DC
3	LED TYPE	SMD 3528 LED
4	COLORS AVAILABLE	RED
5	NO OF LED'S	01
6	OPERATING TEMPERATURE	-25°C to 75°C
7	STORAGE TEMPERATURE	-25°C to 85°C
8	PHYSICAL DIMENSION LxWxH	69.5x54.5x35mm
9	MATERIAL	ABS
10	CURRENT RATING	1 AMP

### Bill of Material

S/NO	Description	Qty	Material
1	SOS Body Case	1No	Nylon6 30%GF
2	Push Button & Button Cap	1No	ABS
3	Lid	1No	ABS
4	Rubber Lid	1No	NR
5	Screws - M4 x 25mm Self Tapping	2Nos	SS



1-SWITCH IN (EMR_SW_IN)	Pr	0.50
2-LED'S ANODE (B+ve)	R	0.50

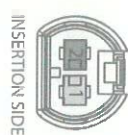


2MK\_050\_MH  
MAKE: BESAMAK  
Scale: 2:1

- NOTES:
1. ALL CONNECTOR VIEWS ARE SHOWN FROM WIRE INSERTION SIDE.
  2. ALL WIRES ARE FLRY-B AS PER DIN 72551.
  3. ALL DIMENSIONS ARE IN MM UNLESS SPECIFIED.
  4. WIRE DIMENSIONS SHOWN ARE FROM BACK END OF THE CONNECTOR.

FULL HEAT SHRINK SLEEVE

100±5



2FK\_050\_MH  
MAKE: BESAMAK  
MOLEX TERMINAL-39000059

1-SWITCH OUT (EMR_SW_OUT)	Y	0.50
2-LED'S CATHODE (D_OUT)	Gy	0.50

MATERIAL: ABS & Nylon  
30% GF  
Colour: BLACK

**ITRiangle**  
 Innovative solutions • Better

**Aquila SOS**  
 PANIC BUTTON 2 POLE

DRAWN BY	RAJESH K	SIGNATURE	
CHECKED BY	PRATIK S	SIGNATURE	
VERIFIED BY	ABHISHEK A	SIGNATURE	
SIZE	A3	PART NUMBER	ITR-PB-0029
SCALE	1:1	WEIGHT (kg)	66g
PART NAME	PANIC BUTTON 2 POLE		
REV	MAH	REV	01