



दूरसंचार विभाग, भारत सरकार


DEPARTMENT OF TELECOMMUNICATIONS, GOVERNMENT OF INDIA

दूरसंचार अभियांत्रिकी केंद्र

TELECOMMUNICATION ENGINEERING CENTRE

CERTIFICATE OF MANDATORY CONFORMANCE

This is to certify that the product described below conforms to the Essential Requirement issued by TEC under Mandatory Testing and Certification of Telecom Equipment as notified vide Indian Telegraph (Amendment) Rules, 2017.

i.	*Certificate No.: 237302231	ii.	Dated: 09-Sep-2024
iii.	Certificate Category: Regular	iv.	Certificate Type: MODIFIED
v.	APPLICANT: ABN Equipments And Systems Private Limited, E-7, Gandhi Nagar, Gwalior, Mandhya Pradesh, India - 474002	vi.	ORIGINAL EQUIPMENT MANUFACTURER: MSA Innovation LLC, 1000 Cranberry Woods Drive, Cranberry Township, Pennsylvania, 16066, USA
vii.	PRODUCT NAME: End Point Device for Environmental Monitoring	viii.	PRODUCT VARIANT: End Point Device for Environmental Monitoring
ix.	PREVIOUS CERTIFICATE NO.: 237302231	x.	PREVIOUS CERTIFICATE ISSUED DATE: 2024-07-02
xi.	MODEL NO.: ALTAIR io 4	xii.	FAMILY NAME: NA
xiii.	ASSOCIATED MODEL NO.: As given at Table-1 overleaf	xiv.	INTERFACES TESTED: As given at Table-2 overleaf
xv.	SOFTWARE VERSION: 1.3.19	xvi.	HARDWARE VERSION: 1.2
xvii.	VALID FROM: 09-Sep-2024	xviii.	VALID UPTO: 01-Apr-2034
xix.	ER NO.: TEC23732401	<div>ranjana sivaram</div> <div>Digitally signed by ranjana sivaram Date: 2024.09.09 17:19:57 +05'30'</div> <div>DIRECTOR (TC-1) K L Bhawan, Janpath, New Delhi - 110001</div>	
xx.	EMI / EMC CLASS: B		
xxi.	QR CODE: 		

Note:

- *1. This certificate is valid for product(s) manufactured in United States of America only, as per the details at Table-3.
2. This certificate is issued for model/family name indicated at (xi) above and applicable for associated/ family model(s) mentioned at Table-1, overleaf only.
3. Bill of Material covered under this certificate is given at Table-4.
4. Terms & Conditions mentioned at MTCTE portal (<https://www.mtcte.tec.gov.in/>) shall be applicable.

Table-1

List of Associated/Family Models	
i.	Nil



Table-2

List of Interfaces Tested	
i.	GSM or GPRS or EDGE



Table-3

List of manufacturing locations (as declared by the applicant) for which this certificate (No. 237302231) is valid:								
S. No.	Product Model number	Contract Manufacturing	Manufacturing Location Address	Contact Person Name (Plant Incharge)	E-mail-ID	Contact number	*Country Of Origin	**Country of Manufacturing
1	Altair io 4	No	MSA Innovation LLC 1000 Cranberry Woods Drive Cranberry Township PA 16066 USA	Tanjila Haque	MSAProductCompliance@msasafety.com	8782501738	United States of America	United States of America

Note: *1. Country of Origin is as per the criteria defined under Custom Rules.

**2. Country of Manufacturing refers to the place where the Telecom product under certification against product model number given above is manufactured/assembled as complete unit only.

Table-4

Details of major modules / components (as declared by the applicant) of the model under certification (BILL OF MATERIAL)							
Module Name/Atrribute Name	Module Code	Module Hardware Version	Module Software Version	Sub Unit Name	Sub Unit Model No.	Remarks	Module present in Main Model
Module No.							ALTAIR io 4
Usage Scenario of Eqpt.						End Point Device for Environmental Monitoring	Y
Class of Equipment						Class B	Y
Battery Source	10205643					3.7Vdc,1.96Ah,7 .25Wh Device powered through battery	Y
GSM Interface	U-Blox NEO-M8Q-0					Operating Frequency 1. Uplink (MHz) - 824.2 to 848.8 Downlink(MHz) - 869.2 to 893.8 2. Uplink (MHz) - 880 to 915 Downlink(MHz) - 925 to 960	Y

Details of major modules / components (as declared by the applicant) of the model under certification (BILL OF MATERIAL)

Module Name/Atrtribute Name	Module Code	Module Hardware Version	Module Software Version	Sub Unit Name	Sub Unit Model No.	Remarks	Module present in Main Model
						3. Uplink (MHz) - 1710.2 to 1784.8 Downlink(MHz) - 1805.2 to 1879.8	
Main Board	10242558	1.2	1.3.19				Y
GSM Interface	U-Blox SARA-R412M					Operating Frequency 1. Uplink (MHz) - 824.2 to 848.8 Downlink(MHz) - 869.2 to 893.8 2. Uplink (MHz) - 880 to 915 Downlink(MHz) - 925 to 960 3. Uplink (MHz) - 1710.2 to 1784.8 Downlink(MHz) - 1805.2 to 1879.8	Y

*** End of the certificate***