

ISO 5110:2023-08 (E)

Test method for flight stability of a multi-copter unmanned aircraft system (UAS) under wind and rain conditions

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	General principles	2
4.1	Test purpose	2
4.2	Test condition	2
4.3	Test apparatus	2
4.4	Test method	3
4.4.1	General	3
4.4.2	Take-off and landing stability test under wind	5
4.4.3	Take-off and landing stability test under wind and rainfall	5
4.4.4	Six-directional flight stability test under wind	5
4.4.5	Six-directional flight stability test under wind and rainfall	5
4.4.6	Flight stability test under wind during a 360° rotational flight	5
4.4.7	Flight stability test under wind and rainfall during a 360° rotational flight	5
4.5	Measurement system	5
5	Test process	6
5.1	Preparatory procedure	6
5.2	Test procedure	6
5.2.1	Take-off landing stability under wind	6
5.2.2	Take-off landing stability under wind and rainfall	6
5.2.3	Six-directional flight stability under wind	7
5.2.4	Six-directional flight stability under wind and rainfall	8
5.2.5	360° rotational stability under wind	9
5.2.6	360° rotation stability under wind and rainfall	9
6	Examination and evaluation	9
Annex A (informative) Examples of the multi-copter UAS flight stability test		10
Annex B (informative) Example of the report format for the multi-copter UAS flight stability test		18
Bibliography		20