



# TEST REPORT

Report No.: NEMA20120401  
Page: 1 of 5  
Date: April 19,2012

The following merchandise was submitted and identified by the vendor as:

Product Description: Industrial LCD Panel PC  
Style/ Item No.: ESPMW2155D-FHD TR  
Manufacturer/ Vendor: i-Tech Company  
Quantity: Total 1 set  
Testing Period: April 9 to 14, 2012

We have tested the submitted sample(s) as requested and the following results were obtained:

Test Required: Test of Protection Provided by Enclosures According to NEMA 250-2003,  
Enclosure NEMA 4  
protection against access to hazardous parts and against solid foreign  
objects, protection against ingress of water

Test Results:

Conclusion
Submittals sample(s) comply with the requirement and acceptance conditions of NEMA 250-2003 Enclosures NEMA 4. The detailed description of test result, please see attached sheet(s).

# TEST REPORT

Page: 2 of 5

## Test for Degrees of Protection Provided by Enclosures:

### Test Equipment:

Name	Brand	Model	Serial No.
1.0 mm Test Wire Probe	ED&D	TRP-02	B0050180
Digital Force Gauge	ALGOL	HF-50	HF-106764
Dust Tester	T-MACHINE	TMJ-9723C	T-23-050411
IPX5 Water Jet Hose Nozzle Set	PTL	P03.26	5050565

### Lab Environmental Conditions:

Ambient temperature: 25±3°C

Relative humidity: 55±20%RH

### Test Method/ Specification:

Test method: According to NEMA 250-2003, Enclosure NEMA 4

#### **1. Test for protection against access to hazardous parts:**

Test method: According to NEMA 250-2003, Enclosure NEMA 4

The test wire with 1.0 mm in diameter and 100 mm long is pushed against or inserted through any openings of the enclosure. Examine whether the test wire touches the hazardous live parts inside the enclosure or not.

Test force: 1 N±10 %

#### **2. Test for protection against solid foreign objects:**

Test method: According to NEMA 250-2003, Enclosure NEMA 4

Type of dust: Talcum powder

The amount of dust: 2 kg

The chamber size: 1 m<sup>3</sup>

The maximum depression: -20mbar

Test duration: 8 hours

- Examine the protection against ingress of dust of specimen(s) and perform functional check after this test.

# TEST REPORT

Page: 3 of 5

Test Method/ Specification--Continued:

### **3. Test for protection against water:**

Test method: According to NEMA 250-2003, Enclosure NEMA 4

Internal diameter

of the nozzle: 6.3 mm

Delivery rate: 100 l/min ±5%

Distance from nozzle

to enclosure surface: 3 m

Core of the substantial

stream: circle of approximately 40 mm diameter at 2.5 m distance from nozzle

Test duration: 3 minutes

- Examine the protection against ingress of dust of specimen(s) and perform functional check after this test.
- Functional check: Connect the specimen with rated power 110VAC then examine whether the LED lighten function of specimen could be work normally or not.

# TEST REPORT

**Specimen:**

Style/ Item No.: ESPMW2155D-FHD TR

Quantity: Total 1 set

**Test Result:**

A. Degrees of protection against access to hazardous parts and against solid foreign objects

Test for protection against access to hazardous parts

<b>Test Result</b>		
<b>Check Item</b>		<b>Style/ Item No.</b>
		<b>No.1</b>
1	Does the test wire penetrate any openings of the enclosure?	No
2	(followed check item 1) If the test wire penetrates any openings of the enclosure, does the test wire touch any hazardous live parts or any hazardous mechanical parts?	N/A
3	(followed check item 2) Does adequate clearance be kept between the test wire and hazardous live parts or hazardous mechanical parts?	N/A
Note 1: N/A means "Not Applicable".		

B Test for protection against solid foreign objects

<b>Test Result</b>		
<b>Check Item</b>		<b>Style/ Item No.</b>
		<b>No.1</b>
1	Does any dust deposit inside the enclosure?	No
2	Functional Check	Normal
Note 1: N/A means "Not Applicable".		

# TEST REPORT

Test Result--Continued:

B. Degree of protection against ingress of water

<b>Test Result</b>		
<b>Check Item</b>		<b>Style/ Item No.</b>
		<b>No.1</b>
1	Does any water enter the enclosure?	No
2	(followed check item 1) If any water has entered, does the water accumulate near the cable end or live parts?	N/A
2.1	(followed check item 2) Does the water be sufficient to interfere with the correct operation of the equipment or impair safety?	N/A
2.2	(followed check item 2.1) Does the water deposit on insulation parts where it could lead to tracking along the creepage distances?	N/A
2.3	(followed check item 2.2) Does the water reach live parts or windings not designed to operate when wet?	N/A
3	Functional Check	Normal

Note 1: N/A means "Not Applicable".