

# Electriq Power, Inc.

## TEST REPORT

**SCOPE OF WORK**

OPENADR 2.0B VEN – HTTP PULL & PUSH - ELECTRIQ POWER, INC. - POWERPOD V1.0 - PASSED

**REPORT NUMBER**

1006180692MP-001

**ISSUE DATE**

25-September-2020

**PAGES**

12

**DOCUMENT CONTROL NUMBER**

GFT-OP-10h (6-July-2017)

© 2020 INTERTEK



## TEST REPORT

25-September-2020

Intertek Report No. 1006180692MP-001  
Intertek Project No. (GIN #) (G104448871)

Jan Klube  
Electriq Power  
144511 Catalina St.  
San Leandro, CA 94577  
info@electricpower.com

Ph: (855) 843-0538

**Subject:** OpenADR 2.0b VEN-HTTP Pull & Push test results of the POWERPOD V1.0

Dear Mrs. Jan Klube,

This test report for the *PowerPod V1.0* represents the results of our evaluation of the above referenced product(s) to the requirements contained in the following standards:

### METHODS

#### DESCRIPTION OF TEST METHODS AND STANDARDS

OpenADR 2.0b VEN- HTTP Pull & Push

Test Harness Version 1.1.4

Security Level - Standard

### SUBMITTED DEVICE

Product Type	Product Name	Firmware Version	Model Number
Energy Storage System	PowerPod	1.0	EPP-700-100x

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

**TEST REPORT****TEST ENVIRONMENT**

Lab Setup	Connection	DUT	Environment Used
Virtual Machine	Remote Desktop Connection	UI	X

**TEST EQUIPMENT**

Test Tool	Manufacturer	Model Number	Version/Errata
Test Harness	Quality Logic	OpenADR2.0bCertTest	1.1.4

**WAIVERS GRANTED BY OPENADR ALLIANCE**

Test Case(s)	Failure	OpenADR Response	OpenADR Approver
None			

**TEST REPORT**

**Interpretation of test results:**

Results of the tests carried out by Intertek Testing Services NA, Inc. are described as follows: “**Pass**” indicates the device under test (DUT) was verified against a set of defined prerequisites, test scenarios consisting of a sequence of VEN/VTN message exchanges and has conformed to the expected results set forth by the OpenADR Alliance. “**Fail**” indicates the DUT has not met conformance set forth by the OpenADR Alliance due to a test case scenario failing to run to completion, payload schema validation, conformance rule validation failure or other problems. “**NA**” indicates the test case is not applicable to the DUT, is optional or is marked as NA in the test harness tool. Test cases that are not supported by the DUT will not be listed.

TESTED <21-September-2020 to 25-September-2020>

**Test Case Results – HTTP Pull**

Test Case Name	Result	Log
N1_0010_TH_VTN_1	PASS	View Log TraceLog_092120_143050_060.txt
N1_0080_TH_VTN_1	NA	View Log TraceLog_092120_143304_269.txt
N1_0020_TH_VTN_1	PASS	View Log TraceLog_092120_143348_071.txt
N1_0015_TH_VTN_1	PASS	View Log TraceLog_092120_143557_298.txt
N1_0050_TH_VTN_1	PASS	View Log TraceLog_092120_144442_688.txt
N1_0060_TH_VTN_1	PASS	View Log TraceLog_092120_151420_367.txt
N1_0065_TH_VTN_1	PASS	View Log TraceLog_092120_151711_195.txt
N1_0070_TH_VTN_1	PASS	View Log TraceLog_092120_151951_802.txt
N1_0040_TH_VTN_1	PASS	View Log TraceLog_092120_152330_286.txt
N1_0025_TH_VTN_1	PASS	View Log TraceLog_092120_153425_608.txt
N1_0030_TH_VTN_1	PASS	View Log TraceLog_092120_153657_710.txt
R1_3010_TH_VTN_1	PASS	View Log TraceLog_092120_154209_329.txt
R1_3020_TH_VTN_1	PASS	View Log TraceLog_092120_154319_658.txt
R1_3025_TH_VTN_1	PASS	View Log TraceLog_092120_155616_341.txt
R1_3027_TH_VTN_1	PASS	View Log TraceLog_092120_160114_423.txt

**TEST REPORT**

Test Case Name	Result	Log
R1_3030_TH_VTN_1	PASS	View Log TraceLog_092120_160601_484.txt
R1_3040_TH_VTN_1	PASS	View Log TraceLog_092120_160956_195.txt
R1_3045_TH_VTN_1	PASS	View Log TraceLog_092120_161119_063.txt
R1_3050_TH_VTN_1	PASS	View Log TraceLog_092120_161436_631.txt
R1_3060_TH_VTN_1	PASS	View Log TraceLog_092120_161607_511.txt
R1_3130_TH_VTN_1	PASS	View Log TraceLog_092220_081127_822.txt
R1_3150_TH_VTN_1	PASS	View Log TraceLog_092220_081250_043.txt
R1_3160_TH_VTN_1	PASS	View Log TraceLog_092220_081451_880.txt
R1_3180_TH_VTN_1	PASS	View Log TraceLog_092220_082348_567.txt
R1_3190_TH_VTN_1	PASS	View Log TraceLog_092220_082516_452.txt
R1_3170_TH_VTN_1	PASS	View Log TraceLog_092220_084206_414.txt
P1_2010_TH_VTN_1	PASS	View Log TraceLog_092220_084523_172.txt
P1_2015_TH_VTN_1	PASS	View Log TraceLog_092220_084732_873.txt
P1_2020_TH_VTN_1	PASS	View Log TraceLog_092220_084848_563.txt
P1_2030_TH_VTN_1	PASS	View Log TraceLog_092220_085006_316.txt
P1_2040_TH_VTN_1	PASS	View Log TraceLog_092220_085120_516.txt
P1_2050_TH_VTN_1	NA	View Log TraceLog_092220_085240_435.txt
A_E1_0020_TH_VTN_1	PASS	View Log TraceLog_092220_085642_318.txt
A_E1_0040_TH_VTN_1	PASS	View Log TraceLog_092220_085810_781.txt
A_E1_0060_TH_VTN_1	PASS	View Log TraceLog_092220_090235_127.txt
A_E1_0070_TH_VTN_1	PASS	View Log TraceLog_092220_090403_673.txt
A_E1_0082_TH_VTN_1	PASS	View Log TraceLog_092220_090512_042.txt
A_E1_0086_TH_VTN_1	PASS	View Log TraceLog_092220_090710_866.txt
A_E1_0090_TH_VTN_1	PASS	View Log TraceLog_092220_091314_102.txt
A_E1_0092_TH_VTN_1	PASS	View Log TraceLog_092220_092021_955.txt

**TEST REPORT**

Test Case Name	Result	Log
A_E1_0094_TH_VTN_1	PASS	View Log TraceLog_092220_092238_894.txt
A_E1_0096_TH_VTN_1	PASS	View Log TraceLog_092220_092329_822.txt
A_E1_0098_TH_VTN_1	PASS	View Log TraceLog_092220_092451_441.txt
A_E1_0100_TH_VTN_1	PASS	View Log TraceLog_092220_092605_333.txt
A_E1_0102_TH_VTN_1	PASS	View Log TraceLog_092220_092726_043.txt
A_E1_0104_TH_VTN_1	PASS	View Log TraceLog_092220_092913_248.txt
A_E1_0110_TH_VTN_1	PASS	View Log TraceLog_092220_093029_892.txt
A_E1_0130_TH_VTN_1	PASS	View Log TraceLog_092220_093142_510.txt
A_E1_0180_TH_VTN_1	PASS	View Log TraceLog_092220_093709_226.txt
A_E1_0190_TH_VTN_1	PASS	View Log TraceLog_092220_093831_338.txt
A_E1_0210_TH_VTN_1	PASS	View Log TraceLog_092220_094209_665.txt
A_E1_0220_TH_VTN_1	PASS	View Log TraceLog_092220_094425_598.txt
A_E1_0230_TH_VTN_1	PASS	View Log TraceLog_092220_094809_275.txt
A_E1_0240_TH_VTN_1	PASS	View Log TraceLog_092220_095739_011.txt
A_E1_0250_TH_VTN_1	PASS	View Log TraceLog_092220_101226_301.txt
A_E1_0260_TH_VTN_1	PASS	View Log TraceLog_092220_102421_481.txt
A_E1_0260_TH_VTN_1	PASS	View Log TraceLog_092220_103438_338.txt
A_E1_0260_TH_VTN_1	PASS	View Log TraceLog_092220_103913_342.txt
A_E1_0262_TH_VTN_1	PASS	View Log TraceLog_092220_104701_298.txt
A_E1_0262_TH_VTN_1	PASS	View Log TraceLog_092220_105306_588.txt
A_E1_0262_TH_VTN_1	PASS	View Log TraceLog_092220_105917_335.txt
A_E1_0267_TH_VTN_1	PASS	View Log TraceLog_092220_110448_248.txt
A_E1_0267_TH_VTN_1	PASS	View Log TraceLog_092220_112259_838.txt
A_E1_0267_TH_VTN_1	PASS	View Log TraceLog_092220_113053_419.txt
A_E1_0268_TH_VTN_1	PASS	View Log TraceLog_092220_114115_888.txt

**TEST REPORT**

Test Case Name	Result	Log
A_E1_0268_TH_VTN_1	PASS	View Log TraceLog_092220_115711_340.txt
A_E1_0268_TH_VTN_1	PASS	View Log TraceLog_092220_120902_388.txt
A_E1_0270_TH_VTN_1	PASS	View Log TraceLog_092220_121905_397.txt
A_E1_0280_TH_VTN_1	PASS	View Log TraceLog_092220_122552_709.txt
A_E1_0300_TH_VTN_1	PASS	View Log TraceLog_092220_123020_143.txt
A_E1_0310_TH_VTN_1	PASS	View Log TraceLog_092220_123641_563.txt
A_E1_0340_TH_VTN_1	PASS	View Log TraceLog_092220_123819_113.txt
A_E1_0345_TH_VTN_1	PASS	View Log TraceLog_092220_123915_462.txt
A_E1_0360_TH_VTN_1	PASS	View Log TraceLog_092220_124016_601.txt
A_E1_0370_TH_VTN_1	PASS	View Log TraceLog_092220_124126_848.txt
A_E1_0390_TH_VTN_1	PASS	View Log TraceLog_092220_124922_691.txt
A_E1_0392_TH_VTN_1	PASS	View Log TraceLog_092220_125035_471.txt
E1_1010_TH_VTN_1	PASS	View Log TraceLog_092220_125725_237.txt
E1_1020_TH_VTN_1	PASS	View Log TraceLog_092220_131146_264.txt
E1_1025_TH_VTN_1	PASS	View Log TraceLog_092220_131354_013.txt
E1_1027_TH_VTN_1	PASS	View Log TraceLog_092220_131900_272.txt
E1_1030_TH_VTN_1	PASS	View Log TraceLog_092220_132042_290.txt
E1_1040_TH_VTN_1	PASS	View Log TraceLog_092220_132159_341.txt
E1_1055_TH_VTN_1	PASS	View Log TraceLog_092220_132351_306.txt
E1_1060_TH_VTN_1	PASS	View Log TraceLog_092220_132557_148.txt
E1_1065_TH_VTN_1	NA	View Log TraceLog_092220_132658_087.txt
E1_1070_TH_VTN_1	PASS	View Log TraceLog_092220_132727_358.txt
E1_1080_TH_VTN_1	PASS	View Log TraceLog_092220_132834_629.txt
E1_1090_TH_VTN_1	PASS	View Log TraceLog_092220_132924_479.txt
A_E1_0200_TH_VTN_1	PASS	View Log TraceLog_092220_133224_442.txt

**TEST REPORT**

Test Case Name	Result	Log
G1_4005_TH_VTN_1	PASS	View Log TraceLog_092220_134136_826.txt
G1_4010_TH_VTN_1	PASS	View Log TraceLog_092220_134347_170.txt
G1_4007_TH_VTN_1	PASS	View Log TraceLog_092220_134557_519.txt
G1_4012_TH_VTN_1	PASS	View Log TraceLog_092220_135036_288.txt
G1_4015_TH_VTN_1	PASS	View Log TraceLog_092220_135133_167.txt
G1_4030_TH_VTN_1	PASS	View Log TraceLog_092220_135245_011.txt

**Test Case Results – HTTP Push**

Test Case Name	Result	Log
N0_5010_TH_VTN_1	PASS	View Log TraceLog_092320_111117_383.txt
N0_5080_TH_VTN_1	PASS	View Log TraceLog_092320_111416_802.txt
N0_5020_TH_VTN_1	PASS	View Log TraceLog_092320_111555_026.txt
N0_5015_TH_VTN_1	PASS	View Log TraceLog_092320_112047_439.txt
N0_5050_TH_VTN	PASS	View Log TraceLog_092320_112413_106.txt
N0_5060_TH_VTN_1	PASS	View Log TraceLog_092320_112602_056.txt
N0_5065_TH_VTN_1	PASS	View Log TraceLog_092320_112749_100.txt
N0_5040_TH_VTN	PASS	View Log TraceLog_092320_112929_254.txt
N0_5030_TH_VTN_1	PASS	View Log TraceLog_092320_113405_990.txt
N0_5025_TH_VTN_1	PASS	View Log TraceLog_092320_113606_496.txt
N0_5070_TH_VTN_1	PASS	View Log TraceLog_092320_113845_930.txt
R0_8010_TH_VTN	PASS	View Log TraceLog_092320_114407_642.txt
R0_8020_TH_VTN	PASS	View Log TraceLog_092320_114537_273.txt
R0_8025_TH_VTN	PASS	View Log TraceLog_092320_114835_555.txt



**TEST REPORT**

Test Case Name	Result	Log
R0_8027_TH_VTN	PASS	View Log TraceLog_092320_115249_867.txt
R0_8030_TH_VTN	PASS	View Log TraceLog_092320_115749_320.txt
R0_8040_TH_VTN	PASS	View Log TraceLog_092320_120127_211.txt
R0_8045_TH_VTN	PASS	View Log TraceLog_092320_120338_135.txt
R0_8050_TH_VTN	PASS	View Log TraceLog_092320_120540_416.txt
R0_8060_TH_VTN_1	PASS	View Log TraceLog_092320_120717_621.txt
R0_8130_TH_VTN	PASS	View Log TraceLog_092320_120852_702.txt
R0_8150_TH_VTN	PASS	View Log TraceLog_092320_121042_762.txt
R0_8160_TH_VTN	PASS	View Log TraceLog_092320_121234_814.txt
R0_8170_TH_VTN	PASS	View Log TraceLog_092320_122916_515.txt
R0_8180_TH_VTN	PASS	View Log TraceLog_092320_123156_793.txt
R0_8190_TH_VTN	PASS	View Log TraceLog_092320_123331_404.txt
P0_7010_TH_VTN_1	PASS	View Log TraceLog_092320_123616_073.txt
P0_7015_TH_VTN_1	PASS	View Log TraceLog_092320_123730_292.txt
P0_7020_TH_VTN_1	PASS	View Log TraceLog_092320_123850_292.txt
P0_7030_TH_VTN_1	PASS	View Log TraceLog_092320_124001_277.txt
P0_7040_TH_VTN_1	PASS	View Log TraceLog_092320_124107_458.txt
P0_7050_TH_VTN_1	NA	View Log TraceLog_092320_124211_389.txt
A_E0_0020_TH_VTN_1	PASS	View Log TraceLog_092320_124403_303.txt
A_E0_0040_TH_VTN	PASS	View Log TraceLog_092320_124709_911.txt
A_E0_0060_TH_VTN_1	PASS	View Log TraceLog_092320_125427_859.txt
A_E0_0070_TH_VTN_1	PASS	View Log TraceLog_092320_125623_455.txt
A_E0_0082_TH_VTN_1	PASS	View Log TraceLog_092320_125843_099.txt
A_E0_0086_TH_VTN_1	PASS	View Log TraceLog_092320_130006_701.txt
A_E0_0090_TH_VTN_1	PASS	View Log TraceLog_092320_130216_430.txt

**TEST REPORT**

Test Case Name	Result	Log
A_E0_0092_TH_VTN_1	PASS	View Log TraceLog_092320_130421_977.txt
A_E0_0094_TH_VTN_1	PASS	View Log TraceLog_092320_130632_910.txt
A_E0_0096_TH_VTN	PASS	View Log TraceLog_092320_130810_743.txt
A_E0_0098_TH_VTN_1	PASS	View Log TraceLog_092320_131124_832.txt
A_E0_0100_TH_VTN_1	PASS	View Log TraceLog_092320_131446_922.txt
A_E0_0102_TH_VTN_1	PASS	View Log TraceLog_092320_131650_690.txt
A_E0_0104_TH_VTN_1	PASS	View Log TraceLog_092320_132146_631.txt
A_E0_0110_TH_VTN_1	PASS	View Log TraceLog_092320_132705_640.txt
A_E0_0130_TH_VTN_1	PASS	View Log TraceLog_092320_132829_170.txt
A_E0_0180_TH_VTN_1	PASS	View Log TraceLog_092320_133007_379.txt
A_E0_0185_TH_VTN_1	PASS	View Log TraceLog_092320_133610_574.txt
A_E0_0190_TH_VTN_1	PASS	View Log TraceLog_092320_133802_532.txt
A_E0_0210_TH_VTN_1	PASS	View Log TraceLog_092320_134024_895.txt
A_E0_0220_TH_VTN_1	PASS	View Log TraceLog_092320_134634_554.txt
A_E0_0230_TH_VTN	PASS	View Log TraceLog_092320_135209_064.txt
A_E0_0240_TH_VTN	PASS	View Log TraceLog_092320_142939_107.txt
A_E0_0260_TH_VTN_1	PASS	View Log TraceLog_092320_152552_103.txt
A_E0_0260_TH_VTN_1	PASS	View Log TraceLog_092320_153117_275.txt
A_E0_0260_TH_VTN_1	PASS	View Log TraceLog_092320_153507_752.txt
A_E0_0262_TH_VTN_1	PASS	View Log TraceLog_092320_153810_101.txt
A_E0_0262_TH_VTN_1	PASS	View Log TraceLog_092320_155155_864.txt
A_E0_0262_TH_VTN_1	PASS	View Log TraceLog_092320_155834_307.txt
A_E0_0267_TH_VTN_1	PASS	View Log TraceLog_092420_105239_292.txt
A_E0_0267_TH_VTN_1	PASS	View Log TraceLog_092420_105749_629.txt
A_E0_0267_TH_VTN_1	PASS	View Log TraceLog_092420_110407_315.txt

**TEST REPORT**

Test Case Name	Result	Log
A_E0_0268_TH_VTN_1	PASS	View Log TraceLog_092420_110929_129.txt
A_E0_0268_TH_VTN_1	PASS	View Log TraceLog_092420_111456_419.txt
A_E0_0268_TH_VTN_1	PASS	View Log TraceLog_092420_112028_628.txt
A_E0_0270_TH_VTN_1	PASS	View Log TraceLog_092420_112532_784.txt
A_E0_0285_TH_VTN_1	PASS	View Log TraceLog_092420_114854_943.txt
A_E0_0300_TH_VTN_1	PASS	View Log TraceLog_092420_115458_874.txt
A_E0_0310_TH_VTN_1	PASS	View Log TraceLog_092420_115622_555.txt
A_E0_0340_TH_VTN_1	PASS	View Log TraceLog_092420_115753_770.txt
A_E0_0345_TH_VTN_1	PASS	View Log TraceLog_092420_115940_538.txt
A_E0_0360_TH_VTN_1	PASS	View Log TraceLog_092420_120110_721.txt
A_E0_0370_TH_VTN_1	PASS	View Log TraceLog_092420_120250_106.txt
A_E0_0390_TH_VTN_1	PASS	View Log TraceLog_092420_120602_652.txt
A_E0_0392_TH_VTN_1	PASS	View Log TraceLog_092420_120732_617.txt
E0_6010_TH_VTN	PASS	View Log TraceLog_092420_121011_848.txt
E0_6020_TH_VTN	PASS	View Log TraceLog_092420_121116_923.txt
E0_6025_TH_VTN	PASS	View Log TraceLog_092420_121250_763.txt
E0_6027_TH_VTN	PASS	View Log TraceLog_092420_121418_020.txt
E0_6030_TH_VTN	PASS	View Log TraceLog_092420_121537_032.txt
E0_6040_TH_VTN	PASS	View Log TraceLog_092420_122045_344.txt
E0_6050_TH_VTN_1	PASS	View Log TraceLog_092420_122358_511.txt
E0_6055_TH_VTN	PASS	View Log TraceLog_092420_122510_768.txt
E0_6060_TH_VTN	PASS	View Log TraceLog_092420_122853_983.txt
E0_6065_TH_VTN	NA	View Log TraceLog_092420_123026_614.txt
E0_6070_TH_VTN	PASS	View Log TraceLog_092420_123057_983.txt
E0_6080_TH_VTN	PASS	View Log TraceLog_092420_123210_288.txt

## TEST REPORT

Test Case Name	Result	Log
E0_6090_TH_VTN	PASS	View Log TraceLog_092420_123326_849.txt
A_E0_0200_TH_VTN_1	PASS	View Log TraceLog_092420_123628_657.txt
G0_9005_TH_VTN	PASS	View Log TraceLog_092420_124053_528.txt
G0_9010_TH_VTN	PASS	View Log TraceLog_092420_124328_089.txt
G0_9030_TH_VTN	PASS	View Log TraceLog_092420_124517_923.txt
A_E0_0250_TH_VTN_1	PASS	View Log TraceLog_092520_081521_849.txt
A_E0_0280_TH_VTN_1	PASS	View Log TraceLog_092520_082058_883.txt

## REPORT AUTHORIZED



Florencio Ponce

Engineer



Vincent Brooks

Reviewer