

HDSP/FU CERTIFICATION TEST REPORT

HDSP/FU INFORMATION

Model : 2202-HV
Manufacturer : XYZ
Serial Number : 56789-TYU
Agency : MyDOT
Location : Signal Shop
Tested By : John Doe
Note1: Yearly Certification
Note2:

TESTER INFORMATION

Manufacturer : ATSI
Model : ASPT-5300
Serial Number : 5300-0
Firmware Ver. : 2
ASPT-5300 Test Manager v1.0

Start Time: Feb 25 2021 01:21 pm

SB3 Comms Addr 01 Test

- Address pins set to 01
- 61 Vrms applied to HVMAIN
- 500 ms delay
- Valid Type 01 command frames sent, address byte = 01
- 03 frames sent, 03 frames received, (as expected)
- Invalid Type 01 frames sent, bad CRC, address byte = 01
- 03 frames sent, 00 frames received, (as expected)
- Valid Type 01 command frames sent, address byte = 01
- 03 frames sent, 03 frames received, (as expected)
- Invalid Type 01 command frames sent, wrong address, address byte = 02
- 03 frames sent, 00 frames received, (as expected)
- Invalid Type 01 command frames sent, wrong address, address byte = 03
- 03 frames sent, 00 frames received, (as expected)
- Invalid Type 01 command frames sent, wrong address, address byte = 04
- 03 frames sent, 00 frames received, (as expected)
- Invalid Type 01 command frames sent, wrong address, address byte = 05
- 03 frames sent, 00 frames received, (as expected)
- Invalid Type 01 command frames sent, wrong address, address byte = 06
- 03 frames sent, 00 frames received, (as expected)
- Invalid Type 01 command frames sent, wrong address, address byte = 07
- 03 frames sent, 00 frames received, (as expected)
- Invalid Type 01 command frames sent, wrong address, address byte = 08
- 03 frames sent, 00 frames received, (as expected)
- Invalid Type 01 command frames sent, wrong address, address byte = 09

- 03 frames sent, 00 frames received, (as expected)
 - Invalid Type 01 command frames sent, wrong address, address byte = 10
 - 03 frames sent, 00 frames received, (as expected)
 - Invalid Type 01 command frames sent, wrong address, address byte = 11
 - 03 frames sent, 00 frames received, (as expected)
 - Invalid Type 01 command frames sent, wrong address, address byte = 12
 - 03 frames sent, 00 frames received, (as expected)
 - Invalid Type 01 command frames sent, wrong address, address byte = 13
 - 03 frames sent, 00 frames received, (as expected)
 - Invalid Type 01 command frames sent, wrong address, address byte = 14
 - 03 frames sent, 00 frames received, (as expected)
 - Invalid Type 01 command frames sent, wrong address, address byte = 15
 - 03 frames sent, 00 frames received, (as expected)
 - Invalid Type 01 command frames sent, wrong address, address byte = 16
 - 03 frames sent, 00 frames received, (as expected)
 - Valid Type 01 command frames sent, address byte = 01
 - 03 frames sent, 03 frames received, (as expected)
 - AC power removed
 - Delay 1.5 seconds
- Test Result = PASS

SB3 Comms Addr 02 Test

- Address pins set to 02
- 61 Vrms applied to HVMAIN
- 500 ms delay
- Valid Type 01 command frames sent, address byte = 02
- 03 frames sent, 03 frames received, (as expected)
- Invalid Type 01 frames sent, bad CRC, address byte = 02
- 03 frames sent, 00 frames received, (as expected)
- Valid Type 01 command frames sent, address byte = 02
- 03 frames sent, 03 frames received, (as expected)
- Invalid Type 01 command frames sent, wrong address, address byte = 01
- 03 frames sent, 00 frames received, (as expected)
- Invalid Type 01 command frames sent, wrong address, address byte = 03
- 03 frames sent, 00 frames received, (as expected)
- Invalid Type 01 command frames sent, wrong address, address byte = 04
- 03 frames sent, 00 frames received, (as expected)
- Invalid Type 01 command frames sent, wrong address, address byte = 05
- 03 frames sent, 00 frames received, (as expected)
- Invalid Type 01 command frames sent, wrong address, address byte = 06
- 03 frames sent, 00 frames received, (as expected)
- Invalid Type 01 command frames sent, wrong address, address byte = 07
- 03 frames sent, 00 frames received, (as expected)
- Invalid Type 01 command frames sent, wrong address, address byte = 08
- 03 frames sent, 00 frames received, (as expected)
- Invalid Type 01 command frames sent, wrong address, address byte = 09

- Invalid Type 02 command frames sent, wrong address, address byte = 07
- 03 frames sent, 00 frames received, (as expected)
- Invalid Type 02 command frames sent, wrong address, address byte = 08
- 03 frames sent, 00 frames received, (as expected)
- Invalid Type 02 command frames sent, wrong address, address byte = 09
- 03 frames sent, 00 frames received, (as expected)
- Invalid Type 02 command frames sent, wrong address, address byte = 10
- 03 frames sent, 00 frames received, (as expected)
- Invalid Type 02 command frames sent, wrong address, address byte = 11
- 03 frames sent, 00 frames received, (as expected)
- Invalid Type 02 command frames sent, wrong address, address byte = 12
- 03 frames sent, 00 frames received, (as expected)
- Invalid Type 02 command frames sent, wrong address, address byte = 13
- 03 frames sent, 00 frames received, (as expected)
- Invalid Type 02 command frames sent, wrong address, address byte = 14
- 03 frames sent, 00 frames received, (as expected)
- Invalid Type 02 command frames sent, wrong address, address byte = 15
- 03 frames sent, 00 frames received, (as expected)
- Invalid Type 02 command frames sent, wrong address, address byte = 16
- 03 frames sent, 00 frames received, (as expected)
- Valid Type 02 command frames sent, address byte = 31
- 03 frames sent, 03 frames received, (as expected)
- Flashing detected for FL1-1, FL1-2, FL2-1, FL2-2
- AC power removed
- Delay 1.5 seconds

Test Result = PASS

Voltage Sense Test

- Address pins set to 1
- AC line applied HVMAIN
- 500 ms delay
- R1 set to 25Vrms (+,-), HDSP reading = 24.8Vrms PASS
- Y1 set to 25Vrms (+,-), HDSP reading = 24.7Vrms PASS
- G1 set to 25Vrms (+,-), HDSP reading = 24.7Vrms PASS
- R2 set to 25Vrms (+,-), HDSP reading = 24.7Vrms PASS
- Y2 set to 25Vrms (+,-), HDSP reading = 24.7Vrms PASS
- G2 set to 25Vrms (+,-), HDSP reading = 24.8Vrms PASS
- R1 set to 50Vrms (+,-), HDSP reading = 50.2Vrms PASS
- Y1 set to 50Vrms (+,-), HDSP reading = 50.0Vrms PASS
- G1 set to 50Vrms (+,-), HDSP reading = 50.1Vrms PASS
- R2 set to 50Vrms (+,-), HDSP reading = 50.0Vrms PASS
- Y2 set to 50Vrms (+,-), HDSP reading = 50.1Vrms PASS
- G2 set to 50Vrms (+,-), HDSP reading = 50.1Vrms PASS
- R1 set to 75Vrms (+,-), HDSP reading = 75.3Vrms PASS
- Y1 set to 75Vrms (+,-), HDSP reading = 75.2Vrms PASS
- G1 set to 75Vrms (+,-), HDSP reading = 75.2Vrms PASS

- R2 set to 75Vrms (+,-), HDSP reading = 75.2Vrms PASS
- Y2 set to 75Vrms (+,-), HDSP reading = 75.2Vrms PASS
- G2 set to 75Vrms (+,-), HDSP reading = 75.2Vrms PASS
- R1 set to 100Vrms (+,-), HDSP reading = 99.9Vrms PASS
- Y1 set to 100Vrms (+,-), HDSP reading = 99.8Vrms PASS
- G1 set to 100Vrms (+,-), HDSP reading = 99.8Vrms PASS
- R2 set to 100Vrms (+,-), HDSP reading = 99.9Vrms PASS
- Y2 set to 100Vrms (+,-), HDSP reading = 99.9Vrms PASS
- G2 set to 100Vrms (+,-), HDSP reading = 99.9Vrms PASS
- R1 set to 125Vrms (+,-), HDSP reading = 124.8Vrms PASS
- Y1 set to 125Vrms (+,-), HDSP reading = 124.7Vrms PASS
- G1 set to 125Vrms (+,-), HDSP reading = 124.6Vrms PASS
- R2 set to 125Vrms (+,-), HDSP reading = 124.7Vrms PASS
- Y2 set to 125Vrms (+,-), HDSP reading = 124.8Vrms PASS
- G2 set to 125Vrms (+,-), HDSP reading = 124.8Vrms PASS
- R1 set to 75Vrms (+,), HDSP reading = 75.1Vrms PASS
- Y1 set to 75Vrms (+,), HDSP reading = 75.0Vrms PASS
- G1 set to 75Vrms (+,), HDSP reading = 75.1Vrms PASS
- R2 set to 75Vrms (+,), HDSP reading = 75.1Vrms PASS
- Y2 set to 75Vrms (+,), HDSP reading = 75.2Vrms PASS
- G2 set to 75Vrms (+,), HDSP reading = 75.1Vrms PASS
- R1 set to 50Vrms (+,), HDSP reading = 49.9Vrms PASS
- Y1 set to 50Vrms (+,), HDSP reading = 49.9Vrms PASS
- G1 set to 50Vrms (+,), HDSP reading = 50.0Vrms PASS
- R2 set to 50Vrms (+,), HDSP reading = 49.9Vrms PASS
- Y2 set to 50Vrms (+,), HDSP reading = 50.0Vrms PASS
- G2 set to 50Vrms (+,), HDSP reading = 50.0Vrms PASS
- R1 set to 25Vrms (+,), HDSP reading = 24.9Vrms PASS
- Y1 set to 25Vrms (+,), HDSP reading = 24.9Vrms PASS
- G1 set to 25Vrms (+,), HDSP reading = 24.8Vrms PASS
- R2 set to 25Vrms (+,), HDSP reading = 24.9Vrms PASS
- Y2 set to 25Vrms (+,), HDSP reading = 24.9Vrms PASS
- G2 set to 25Vrms (+,), HDSP reading = 24.9Vrms PASS
- R1 set to 25Vrms (,-), HDSP reading = 24.9Vrms PASS
- Y1 set to 25Vrms (,-), HDSP reading = 24.9Vrms PASS
- G1 set to 25Vrms (,-), HDSP reading = 24.8Vrms PASS
- R2 set to 25Vrms (,-), HDSP reading = 24.9Vrms PASS
- Y2 set to 25Vrms (,-), HDSP reading = 24.9Vrms PASS
- G2 set to 25Vrms (,-), HDSP reading = 24.9Vrms PASS
- R1 set to 50Vrms (,-), HDSP reading = 49.9Vrms PASS
- Y1 set to 50Vrms (,-), HDSP reading = 49.9Vrms PASS
- G1 set to 50Vrms (,-), HDSP reading = 49.9Vrms PASS
- R2 set to 50Vrms (,-), HDSP reading = 49.9Vrms PASS
- Y2 set to 50Vrms (,-), HDSP reading = 49.9Vrms PASS
- G2 set to 50Vrms (,-), HDSP reading = 50.0Vrms PASS
- R1 set to 75Vrms (,-), HDSP reading = 74.5Vrms PASS

- Y1 set to 75Vrms (, -), HDSP reading = 74.4Vrms PASS
- G1 set to 75Vrms (, -), HDSP reading = 74.4Vrms PASS
- R2 set to 75Vrms (, -), HDSP reading = 74.4Vrms PASS
- Y2 set to 75Vrms (, -), HDSP reading = 74.4Vrms PASS
- G2 set to 75Vrms (, -), HDSP reading = 74.5Vrms PASS
- R1 set to AC thru 1500pF, HDSP reading = 1.4Vrms PASS
- Y1 set to AC thru 1500pF, HDSP reading = 1.4Vrms PASS
- G1 set to AC thru 1500pF, HDSP reading = 1.4Vrms PASS
- R2 set to AC thru 1500pF, HDSP reading = 1.4Vrms PASS
- Y2 set to AC thru 1500pF, HDSP reading = 1.4Vrms PASS
- G2 set to AC thru 1500pF, HDSP reading = 1.4Vrms PASS

----- Test Complete -----
Feb 25 2021 01:23 pm
PASSED ALL TESTS

Load Current Measurement Test

- Address pins set to 1
- AC line applied HVMAIN
- 500 ms delay
- R1 load = 96mArms, HDSP reading = 98mArms PASS
- Y1 load = 96mArms, HDSP reading = 98mArms PASS
- G1 load = 96mArms, HDSP reading = 98mArms PASS
- R2 load = 96mArms, HDSP reading = 98mArms PASS
- Y2 load = 96mArms, HDSP reading = 98mArms PASS
- G2 load = 96mArms, HDSP reading = 98mArms PASS
- R1 load = 78mArms, HDSP reading = 80mArms PASS
- Y1 load = 78mArms, HDSP reading = 80mArms PASS
- G1 load = 78mArms, HDSP reading = 80mArms PASS
- R2 load = 78mArms, HDSP reading = 80mArms PASS
- Y2 load = 78mArms, HDSP reading = 80mArms PASS
- G2 load = 78mArms, HDSP reading = 80mArms PASS
- R1 load = 60mArms, HDSP reading = 61mArms PASS
- Y1 load = 60mArms, HDSP reading = 61mArms PASS
- G1 load = 60mArms, HDSP reading = 62mArms PASS
- R2 load = 60mArms, HDSP reading = 61mArms PASS
- Y2 load = 60mArms, HDSP reading = 61mArms PASS
- G2 load = 60mArms, HDSP reading = 61mArms PASS
- R1 load = 42mArms, HDSP reading = 43mArms PASS
- Y1 load = 42mArms, HDSP reading = 43mArms PASS
- G1 load = 42mArms, HDSP reading = 43mArms PASS
- R2 load = 42mArms, HDSP reading = 43mArms PASS
- Y2 load = 42mArms, HDSP reading = 43mArms PASS
- G2 load = 42mArms, HDSP reading = 43mArms PASS
- R1 load = 5mArms, HDSP reading = 8mArms PASS
- Y1 load = 5mArms, HDSP reading = 7mArms PASS
- G1 load = 5mArms, HDSP reading = 7mArms PASS
- R2 load = 5mArms, HDSP reading = 7mArms PASS
- Y2 load = 5mArms, HDSP reading = 7mArms PASS
- G2 load = 5mArms, HDSP reading = 7mArms PASS