The University of Alabama in Huntsville Space Hardware Club

HELEN Data Report

Icon

Description automatically generated

# General Information

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Stat | Payload\_1 | Payload\_2 | Payload\_3 | Payload\_4 |
| 'TIME\_GPS\_ON\_SERIAL' | "738354.8283" | "738354.8399" | "NaN" | "738354.8629" |
| 'TIME\_GPS\_OFF\_SERIAL' | "738355.0194" | "738354.9715" | "NaN" | "738355.1131" |
| 'TIME\_DURATION\_GPS' | "4.5900" | "3.1600" | "NaN" | "6.0100" |
| 'PACKETNUMBER\_FIRST' | "0.0000" | "0.0000" | "NaN" | "0.0000" |
| 'PACKETNUMBER\_LAST' | "16676.0000" | "12535.0000" | "NaN" | "24768.0000" |
| 'NUMBEROFPACKETS\_EXPECTED' | "16677.0000" | "12536.0000" | "NaN" | "24769.0000" |
| 'NUMBEROFPACKETS\_ACTUAL' | "16676.0000" | "12536.0000" | "1.0000" | "24769.0000" |
| 'PACKETNUMBER\_GPSON' | "158.0000" | "1167.0000" | "NaN" | "3146.0000" |
| 'PACKETNUMBER\_GPSOFF' | "16675.0000" | "12534.0000" | "NaN" | "24767.0000" |
| 'NUMBEROFPACKETS\_GPS\_DURATION' | "16517.0000" | "11367.0000" | "NaN" | "21621.0000" |
| 'NUMBEROFPACKETS\_PERSECOND' | "0.9996" | "0.9992" | "NaN" | "0.9993" |
| 'TIME\_ON\_SERIAL' | "738354.8264" | "738354.8264" | "NaN" | "738354.8264" |
| 'TIME\_OFF\_SERIAL' | "738355.0195" | "738354.9715" | "NaN" | "738355.1131" |
| 'TIME\_DURATION' | "4.6320" | "3.4820" | "NaN" | "6.8810" |
| 'TEMP\_MAX' | "41.4300" | "41.3400" | "NaN" | "45.6000" |
| 'TEMP\_MIN' | "2.7400" | "4.8800" | "NaN" | "5.5100" |
| 'TEMP\_MEAN' | "20.3150" | "20.8430" | "NaN" | "29.2110" |
| 'LATITUDE\_START' | "34.7250" | "34.7250" | "0.0000" | "34.7248" |
| 'LONGITUDE\_START' | "-86.6462" | "-86.6461" | "0.0000" | "-86.6464" |
| 'LATITUDE\_END' | "34.6348" | "34.6760" | "0.0000" | "34.6064" |
| 'LONGITUDE\_END' | "-87.1597" | "-86.7957" | "0.0000" | "-87.0640" |
| 'DISTANCE' | "48.0140" | "14.7170" | "0.0000" | "40.3950" |
| 'ACCELERATION\_MAX\_X' | "18.6820" | "15.3180" | "NaN" | "10.1990" |
| 'ACCELERATION\_MAX\_Y' | "6.5310" | "23.9970" | "NaN" | "5.7370" |
| 'ACCELERATION\_MAX\_Z' | "16.0440" | "35.7650" | "NaN" | "25.3210" |
| 'COUNTS\_TOTAL' | "20504576.0000" | "3813376.0000" | "22253568.0000" | "29016064.0000" |
| 'TIME\_FPGACOUNTER\_RESETS' | "16601.0000" | "12653.0000" | "18830.0000" | "24724.0000" |
| 'TIME\_DURATION\_FPGA' | "4.6114" | "3.5147" | "5.2306" | "6.8678" |
| 'COUNTS\_PERSECOND\_MEAN' | "1235.1410" | "301.3810" | "1181.8140" | "1173.5990" |
| 'COUNTS\_PERSECOND\_MAX' | "23382.0000" | "2101.0000" | "17698.0000" | "4641.0000" |
| 'COUNTS\_TOTAL\_1500' | "20503923.0000" | "3813243.0000" | "22252865.0000" | "29015157.0000" |
| 'COUNTS\_PERSECOND\_MEAN\_1500' | "4446365.9430" | "1084934.4560" | "4254397.6200" | "4224824.5360" |
| 'COUNTS\_PERSECOND\_MAX\_1500' | "14.0000" | "1.0000" | "23.0000" | "14.0000" |
| 'TICKS\_RESET\_MEAN' | "46961.2230" | "1037543.0480" | "50573.1180" | "44326.3060" |
| 'TICKS\_COUNTS\_MEAN' | "40481.2080" | "165902.9600" | "42307.8420" | "42603.9900" |
| 'DEADTIME\_MEAN\_US' | "129.6000" | "17432.8020" | "165.3060" | "34.4460" |
| 'DEADTIME\_MEAN\_PERCENT' | "0.0001" | "0.0174" | "0.0002" | "0.0000" |

# Graphs

































