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' | "738602.9375" | "738602.9465" | "738602.9722" | "738602.9573" |
| 'TIME\_GPS\_OFF\_SERIAL' | "738603.2366" | "738603.2395" | "738603.2022" | "738603.0262" |
| 'TIME\_DURATION\_GPS' | "7.1800" | "7.0300" | "5.5200" | "1.6500" |
| 'PACKETNUMBER\_FIRST' | "0.0000" | "0.0000" | "0.0000" | "0.0000" |
| 'PACKETNUMBER\_LAST' | "25927.0000" | "25516.0000" | "29328.0000" | "6122.0000" |
| 'NUMBEROFPACKETS\_EXPECTED' | "25928.0000" | "25517.0000" | "29329.0000" | "6123.0000" |
| 'NUMBEROFPACKETS\_ACTUAL' | "25927.0000" | "25514.0000" | "29329.0000" | "6123.0000" |
| 'PACKETNUMBER\_GPSON' | "88.0000" | "199.0000" | "1789.0000" | "172.0000" |
| 'PACKETNUMBER\_GPSOFF' | "25926.0000" | "25515.0000" | "21660.0000" | "6121.0000" |
| 'NUMBEROFPACKETS\_GPS\_DURATION' | "25838.0000" | "25316.0000" | "19871.0000" | "5949.0000" |
| 'NUMBEROFPACKETS\_PERSECOND' | "0.9996" | "1.0003" | "1.0000" | "1.0015" |
| 'TIME\_ON\_SERIAL' | "738602.9365" | "738602.9442" | "738602.9515" | "738602.9553" |
| 'TIME\_OFF\_SERIAL' | "738603.2366" | "738603.2395" | "738603.2909" | "738603.0262" |
| 'TIME\_DURATION' | "7.2020" | "7.0870" | "8.1470" | "1.7000" |
| 'TEMP\_MAX' | "36.4200" | "34.1300" | "37.0000" | "29.7200" |
| 'TEMP\_MIN' | "-11.5500" | "-17.9900" | "-10.4700" | "-8.8300" |
| 'TEMP\_MEAN' | "25.8450" | "22.5970" | "28.6090" | "11.2680" |
| 'LATITUDE\_START' | "34.7249" | "34.7247" | "35.0935" | "34.7251" |
| 'LONGITUDE\_START' | "-86.6462" | "-86.6467" | "-86.4708" | "-86.6462" |
| 'LATITUDE\_END' | "35.8568" | "35.7502" | "35.6326" | "35.9447" |
| 'LONGITUDE\_END' | "-85.3754" | "-85.5824" | "-85.7080" | "-85.3182" |
| 'DISTANCE' | "170.7140" | "149.4850" | "91.5300" | "181.3820" |
| 'ACCELERATION\_MAX\_X' | "19.4960" | "12.6410" | "13.8670" | "8.9040" |
| 'ACCELERATION\_MAX\_Y' | "15.9360" | "25.0170" | "12.1900" | "5.6190" |
| 'ACCELERATION\_MAX\_Z' | "26.7820" | "28.9880" | "33.8430" | "28.6550" |
| 'COUNTS\_TOTAL' | "29306880.0000" | "552960.0000" | "33943552.0000" | "7036928.0000" |
| 'TIME\_FPGACOUNTER\_RESETS' | "25753.0000" | "24562.0000" | "29200.0000" | "6118.0000" |
| 'TIME\_DURATION\_FPGA' | "7.1536" | "6.8228" | "8.1111" | "1.6994" |
| 'COUNTS\_PERSECOND\_MEAN' | "1137.9990" | "22.5130" | "1162.4500" | "1150.2010" |
| 'COUNTS\_PERSECOND\_MAX' | "23026.0000" | "1180.0000" | "23489.0000" | "1787.0000" |
| 'COUNTS\_TOTAL\_1500' | "29305979.0000" | "552955.0000" | "33942504.0000" | "7036729.0000" |
| 'COUNTS\_PERSECOND\_MEAN\_1500' | "4096669.3600" | "81045.4330" | "4184692.3310" | "4140606.5750" |
| 'COUNTS\_PERSECOND\_MAX\_1500' | "6.0000" | "26.0000" | "8.0000" | "7.0000" |
| 'TICKS\_RESET\_MEAN' | "45499.4340" | "6163072.8350" | "65120.8110" | "85192.1550" |
| 'TICKS\_COUNTS\_MEAN' | "43936.7700" | "2220939.0130" | "43012.6030" | "43470.6630" |
| 'DEADTIME\_MEAN\_US' | "31.2530" | "78842.6760" | "442.1640" | "834.4300" |
| 'DEADTIME\_MEAN\_PERCENT' | "0.0000" | "0.0788" | "0.0004" | "0.0008" |

# Graphs

































