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' | "738689.7238" | "738689.7246" | "NaN" | "738689.7236" |
| 'TIME\_GPS\_OFF\_SERIAL' | "738689.8523" | "738689.9124" | "NaN" | "738690.0801" |
| 'TIME\_DURATION\_GPS' | "3.0800" | "4.5100" | "NaN" | "8.5500" |
| 'PACKETNUMBER\_FIRST' | "0.0000" | "0.0000" | "NaN" | "0.0000" |
| 'PACKETNUMBER\_LAST' | "11178.0000" | "16365.0000" | "NaN" | "30855.0000" |
| 'NUMBEROFPACKETS\_EXPECTED' | "11179.0000" | "16366.0000" | "NaN" | "30856.0000" |
| 'NUMBEROFPACKETS\_ACTUAL' | "11179.0000" | "16364.0000" | "1.0000" | "30856.0000" |
| 'PACKETNUMBER\_GPSON' | "73.0000" | "143.0000" | "NaN" | "57.0000" |
| 'PACKETNUMBER\_GPSOFF' | "11177.0000" | "16364.0000" | "NaN" | "30854.0000" |
| 'NUMBEROFPACKETS\_GPS\_DURATION' | "11104.0000" | "16221.0000" | "NaN" | "30797.0000" |
| 'NUMBEROFPACKETS\_PERSECOND' | "1.0014" | "0.9991" | "NaN" | "1.0006" |
| 'TIME\_ON\_SERIAL' | "738689.7230" | "738689.7230" | "NaN" | "738689.7230" |
| 'TIME\_OFF\_SERIAL' | "738689.8523" | "738689.9124" | "NaN" | "738690.0801" |
| 'TIME\_DURATION' | "3.1050" | "4.5460" | "NaN" | "8.5710" |
| 'TEMP\_MAX' | "48.9000" | "47.5700" | "NaN" | "45.2800" |
| 'TEMP\_MIN' | "0.4500" | "3.2100" | "NaN" | "8.4000" |
| 'TEMP\_MEAN' | "21.6230" | "26.2000" | "NaN" | "35.9490" |
| 'LATITUDE\_START' | "34.7251" | "34.7251" | "0.0000" | "34.7250" |
| 'LONGITUDE\_START' | "-86.6464" | "-86.6464" | "0.0000" | "-86.6464" |
| 'LATITUDE\_END' | "34.6923" | "34.6982" | "0.0000" | "34.6158" |
| 'LONGITUDE\_END' | "-86.7133" | "-86.6730" | "0.0000" | "-86.9438" |
| 'DISTANCE' | "7.1280" | "3.8450" | "0.0000" | "29.7770" |
| 'ACCELERATION\_MAX\_X' | "5.5900" | "11.0520" | "NaN" | "4.9720" |
| 'ACCELERATION\_MAX\_Y' | "10.1110" | "11.2090" | "NaN" | "6.0410" |
| 'ACCELERATION\_MAX\_Z' | "23.4970" | "25.3110" | "NaN" | "19.2700" |
| 'COUNTS\_TOTAL' | "12718079.0000" | "503808.0000" | "31690752.0000" | "11034624.0000" |
| 'TIME\_FPGACOUNTER\_RESETS' | "11479.0000" | "15582.0000" | "28101.0000" | "9589.0000" |
| 'TIME\_DURATION\_FPGA' | "3.1886" | "4.3283" | "7.8058" | "2.6636" |
| 'COUNTS\_PERSECOND\_MEAN' | "1107.9430" | "32.3330" | "1127.7450" | "1150.7590" |
| 'COUNTS\_PERSECOND\_MAX' | "2044.0000" | "162.0000" | "7289.0000" | "1534.0000" |
| 'COUNTS\_TOTAL\_1500' | "12717706.0000" | "503786.0000" | "31689793.0000" | "11034289.0000" |
| 'COUNTS\_PERSECOND\_MEAN\_1500' | "3988478.3690" | "116392.6160" | "4059758.0040" | "4142605.2830" |
| 'COUNTS\_PERSECOND\_MAX\_1500' | "4.0000" | "0.0000" | "7.0000" | "6.0000" |
| 'TICKS\_RESET\_MEAN' | "709747.1540" | "4676685.0270" | "254153.8580" | "76744.8140" |
| 'TICKS\_COUNTS\_MEAN' | "45128.6750" | "1546407.6950" | "44336.2640" | "43449.5840" |
| 'DEADTIME\_MEAN\_US' | "13292.3700" | "62605.5470" | "4196.3520" | "665.9050" |
| 'DEADTIME\_MEAN\_PERCENT' | "0.0133" | "0.0626" | "0.0042" | "0.0007" |

# Graphs

































