**AirVibe Downlink Payload information – Rev 1.03, Date 18 Feb 2025**

Downlink Function: **RESET SENSOR**

**Port:10**

|  |  |
| --- | --- |
| **Downlink payload byte** | **Description** |
| 0 | Command |

Description: Reboots sensor as if power was cycled

Command 17 (11 hex) for RESET

Downlink Function: **MISSED PACKETS**

**Port:21**

|  |  |
| --- | --- |
| **Downlink payload byte** | **Description** |
| 0 | Packet Index Type |
| 1 | Packet Index Count |

Remaining Bytes: Packet Indices of missing segments

Description: Sends a list of missed packets

Downlink Function: **TIME WAVEFORM ACK**

**Port:20**

|  |  |
| --- | --- |
| **Downlink payload byte** | **Description** |
| 0 | Time Waveform Acknowledgement byte |

Description: Acknowledgement to either uplink INFO packet or uplink Last Data packet

1 for Last Data packet, 3 for INFO packet

Downlink Function: **CONFIGURATION INFO**

**Port:30**

|  |  |
| --- | --- |
| **Downlink payload byte** | **Description** |
| 0 | Push Mode |
| 1 | Axis Selection |
| 2 | Accelerometer Range |
| 3 | Hardware Filter |
| 4 | High byte of Time Wave Push Period |
| 5 | Low byte of Time Wave Push Period |
| 6 | High byte of Overall Push Period |
| 7 | Low byte of Overall Push Period |
| 8 | High byte of Number of Samples |
| 9 | Low byte of Number of Samples |
| 10 | High byte of High Pass Filter |
| 11 | Low byte of High Pass Filter |
| 12 | High byte of Low Pass Filter |
| 13 | Low byte of Low Pass Filter |
| 14 | Window Function |
| 15 | High byte of Alarm Test Period |
| 16 | Low byte of Alarm Test Period |

Description: Sends complete configuration information in one downlink payload

Downlink Function: **ALARMS INFO**

**Port:31**

|  |  |
| --- | --- |
| **Downlink payload byte** | **Description** |
| 0 | High byte of alarm bitmask |
| 1 | Low byte of alarm bitmask |
| 2 | High byte of temperature alarm |
| 3 | Low byte of temperature alarm |
| 4 | High byte of axis 1 acceleration alarm |
| 5 | Low byte of axis 1 acceleration alarm |
| 6 | High byte of axis 2 acceleration alarm |
| 7 | Low byte of axis 2 acceleration alarm |
| 8 | High byte of axis 3 acceleration alarm |
| 9 | Low byte of axis 3 velocity alarm |
| 10 | High byte of axis 1 velocity alarm |
| 11 | Low byte of axis 1 velocity alarm |
| 12 | High byte of axis 2 velocity alarm |
| 13 | Low byte of axis 2 velocity alarm |
| 14 | High byte of axis 3 velocity alarm |
| 15 | Low byte of axis 3 velocity alarm |

Description: Configures alarms on the sensor

Downlink Function: **COMMAND**

**Port:22**

|  |  |
| --- | --- |
| **Downlink payload byte** | **Description** |
| 0 | High byte of command |
| 1 | Low byte of command |

Description: The following commands are supported:

|  |  |
| --- | --- |
| **Command** | **Description** |
| 1 | Acknowledges Time Waveform Info Packet |