

## VMxxx 模块 FFT 数据抓包与解析

### 适用于固件 SF3.51

#### 数据抓包

53 49 47 5F 46 46 54 31 B4 3B 99 41 02 00 00 67 00 45 00 3D 00 35 00 34 00 39 00 34 00 2A 00  
2E 00 24 00 31 00 39 00 40 00 4C 00 3E 00 36 00 3D 00 47 00 43 00 3F 00 3B 00 33 00 36 00 37  
00 52 00 53 00 4C 00 54 00 51 00 61 00 61 00 5B 00 58 00 4B 00 47 00 56 00 57 00 55 00 57 00  
58 00 67 00 6B 00 75 00 77 00 6D 00 70 00 6F 00 69 00 37 00 75 00 79 00 6F 00 7A 00 97 00 9D  
00 AA 00 AC 00 B2 00 C1 00 D7 00 E1 00 EA 00 F2 01 0A 01 2A 01 54 01 9B 01 E5 02 6B 03 5A  
05 90 11 21 0E CD 05 08 02 FD 02 1C 01 A3 01 48 01 19 00 F1 00 D6 00 C1 00 A3 00 89 00 70  
00 6C 00 63 00 5B 00 51 00 4A 00 3E 00 4C 00 54 00 48 00 47 00 6E 00 3E 00 35 00 31 00 2D 00  
21 00 1A 00 17 00 14 00 25 00 2A 00 29 00 23 00 19 00 24 00 23 00 17 00 19 00 0E 00 08 00 0B  
00 0B 00 1C 00 1D 00 1C 00 2A 00 1E 00 1E 00 1F 00 1F 00 18 00 0A 00 0F 00 17 00 1A 00 16  
00 17 00 19 00 13 00 22 00 1F 00 24 00 18 00 11 00 18 00 17 00 17 00 0E 00 15 00 09 00 0D 00  
09 00 1A 00 16 00 15 00 18 00 15 00 23 00 19 00 18 00 10 00 14 00 19 00 13 00 0C 00 01 00 03  
00 07 00 0A 00 10 00 13 00 2D 00 0B 00 0A 00 16 00 13 00 0C 00 13 00 19 00 1A 00 15 00 05 00  
04 00 0A 00 0A 00 0B 00 13 00 17 00 12 00 11 00 1F 00 28 00 1F 00 1A 00 18 00 10 00 28 00 19  
00 1C 00 0D 00 0A 00 20 00 26 00 34 00 32 00 2F 00 33 00 40 00 48 00 4A 00 46 00 4A 00 4E 00  
58 00 78 00 8A 00 B3 00 F8 01 AF 05 CF 03 E6 01 6B 00 D8 00 9A 00 7E 00 5E 00 53 00 45 00  
44 00 46 00 3B 00 2F 00 1C 00 1F 00 1B 00 19 00 17 00 13 00 11 00 10 00 1F 00 22 00 2F 00 77  
00 18 00 14 00 1D 00 15 00 0D 00 04 00 04 00 0B 00 05 00 0D 00 12 00 15 00 0B 00 0D 00 10 00  
09 00 0F 00 08 00 09 00 07 00 0A 00 0F 00 1F 00 1B 00 17 00 0F 00 0B 00 11 00 18 00 17 00 06  
00 07 00 0D 00 0F 00 0D 00 12 00 17 00 0A 00 12 00 15 00 1E 00 18 00 13 00 0F 00 15 00 17 00  
11 00 25 00 08 00 09 00 02 00 14 00 16 00 19 00 1A 00 13 00 1E 00 1A 00 20 00 17 00 0D 00 17  
00 17 00 14 00 06 00 03 00 04 00 06 00 0F 00 14 00 35 00 09 00 04 00 13 00 11 00 14 00 06 00 0B  
00 12 00 0F 00 05 00 0B 00 09 00 07 00 01 00 08 00 15 00 0A 00 07 00 0A 00 19 00 16 00 0E 00  
0B 00 08 00 2E 00 0C 00 12 00 09 00 09 00 04 00 09 00 1A 00 19 00 19 00 15 00 1A 00 26 00 2A  
00 28 00 28 00 24 00 25 00 3B 00 3F 00 54 00 6E 00 CB 03 2A 01 A7 00 A4 00 5F 00 42 00 3A 00  
2A 00 25 00 1A 00 1C 00 25 00 24 00 21 00 10 00 0F 00 0E 00 11 00 0F 00 0D 00 15 00 0A 00 19  
00 2B 00 56 00 F6 00 26 00 14 00 20 00 16 00 17 00 06 00 0D 00 16 00 0D 00 06 00 02 00 0C 00  
0D 00 0B 00 05 00 07 00 0C 00 08 00 07 00 0A 00 10 00 0A 00 22 00 16 00 0C 00 09 00 05 00 06  
00 10 00 16 00 09 00 09 00 08 00 0A 00 05 00 0B 00 13 00 0A 00 06 00 0B 00 14 00 15 00 18 00  
0A 00 12 00 15 00 13 00 2F 00 09 00 06 00 05 00 0B 00 10 00 16 00 1B 00 14 00 17 00 14 00 21  
00 1E 00 0D 00 15 00 17 00 19 00 0F 00 08 00 04 00 06 00 09 00 0F 00 35 00 11 00 0F 00 11 00  
0D 00 18 00 0D 00 08 00 0B 00 0A 00 09 00 0E 00 07 00 07 00 07 00 02 00 0F 00 0B 00 11 00 05  
00 0C 00 0F 00 0A 00 08 00 0E 00 28 00 09 00 11 00 08 00 0A 00 07 00 06 00 0B 00 0A 00 12 00  
0D 00 07 00 10 00 17 00 1A 00 1C 00 14 00 11 00 24 00 20 00 2E 00 30 00 5E 01 CE 00 BF 00 51  
00 2D 00 1C 00 1E 00 15 00 14 00 0E 00 09 00 11 00 16

#### 数据解析

53 49 47 5F 46 46 54: 字符串 SIG\_FFT

31: 通道号 ASCII 码, 即字符 1, 表示当前数据包是 1 通道的 FFT 数据

B4 3B 99 41: 浮点数表示的 FFT 数据分辨率, 即 19.1409530639648Hz

02 00: FFT 幅值数据个数

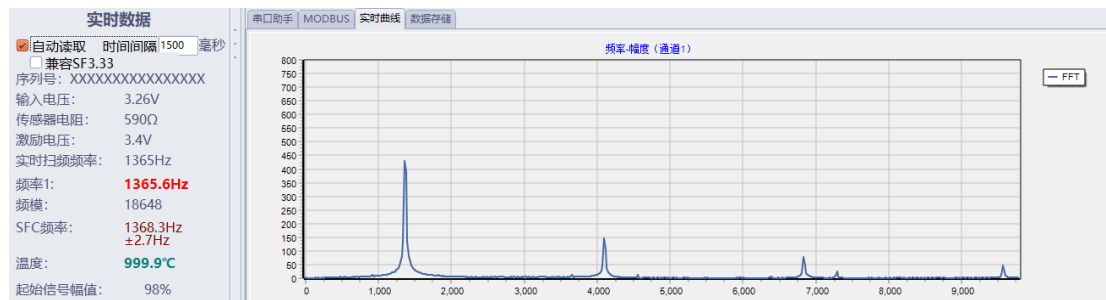
00 67 00 45 00 3D 00 35.....00 11 00 16: FFT 幅值数据，每 2 个字节组成 1 个 16 位整数。

第 1 个幅值 0067 表示 0Hz 的幅值

第 2 个幅值 0045 表示 19.14Hz 的幅值

第 3 个幅值 003D 表示 38.28Hz 的幅值

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上图中，X 轴（横轴）单位为 Hz。