Velodyne tech info

Углы склонения лазеров

-30.67,
-9.33,
-29.33,
-8.00,
-28.00,
-6.66,
-26.66,
-5.33,
-25.33,
-4.00,
-24.00,
-2.67,
-22.67,
-1.33,
-21.33,
0.00,
-20.00,
1.33,
-18.67,
2.67,
-17.33,
4.00,
-16.00,
5.33,
-14.67,
6.67,
-13.33,
8.00,
-12.00,
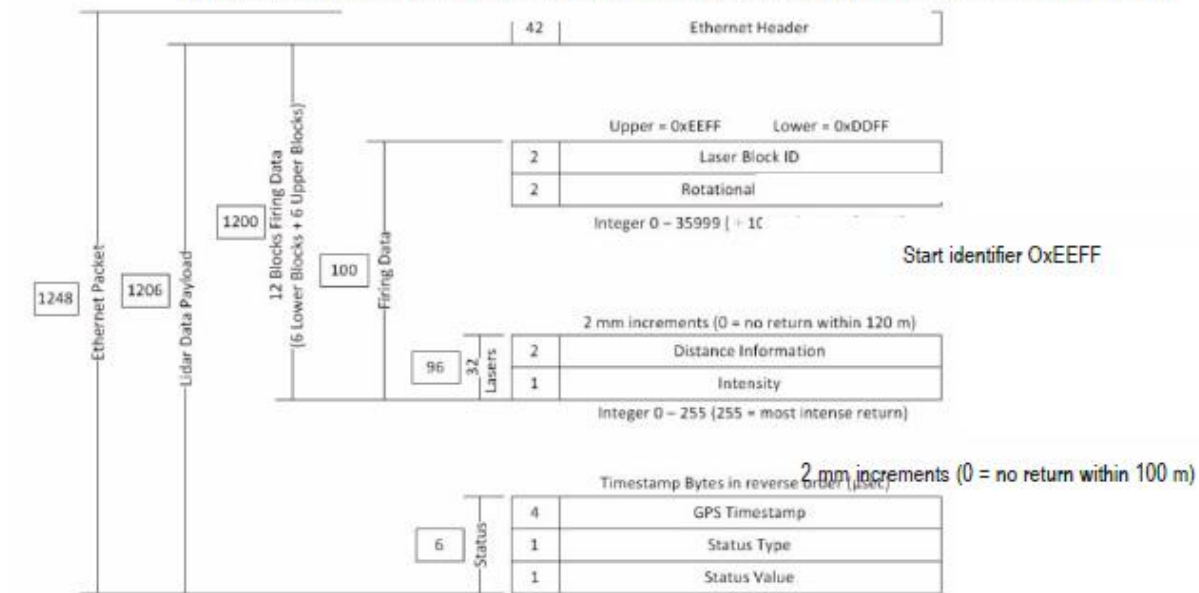9.33,
-10.67,
10.67

Разделитель   0xFF 0xEE

Далее 2 байта азимута   угол =   ([3] * 256 + [2]) / 100

Начиная с байта 4 записи данных с каждого лазера
Дистанция   ([5] * 256 + [4]) * 0.002
Отражение   [6]

User Datagram Protocol (UDP) Ethernet Data Packet Format: HDL-32E (Port 2368)

| 42 | Ethernet Header |

Upper = 0xEEFF   Lower = 0xDDFF

| 2 | Laser Block ID |
| 2 | Rotational |

Integer 0 – 35999 | ÷ 10

Start identifier 0xEEFF

2 mm increments (0 = no return within 120 m)

| 2 | Distance Information |
| 1 | Intensity |

Integer 0 – 255 (255 = most intense return)

Timestamp Bytes in reverse order (μsec.)   2 mm increments (0 = no return within 100 m)

4	GPS Timestamp
1	Status Type
1	Status Value

1248   1206   1200   100   96   6

Ethernet Packet / Lidar Data Payload / 12 Blocks Firing Data (6 Lower Blocks + 6 Upper Blocks) / Firing Data / 32 Lasers / Status

Status Type Rotates Through				Status Value Example		
Hex	ASCII	String	Description	Hex	ASCII	
48	72	H	Hours	15	21	21 Hours (9 pm)
4D	77	M	Minutes	3B	19	19 Minutes
53	83	S	Seconds	37	55	55 Seconds
44	68	D	Date	0F	15	15th day of the Month
4E	78	N	Month	0C	12	12th Month (December)

GPS Status Values			
Hex	ASCII	String and Definition	
41	65	A = GPS receiving both sync signal and NMEA time command record	
56	86	V = GPS receiving NM time command record only	Blank
50	80	P = GPS receiving syr signal only	Blank