

LW-360HR Report Format (DOCOMO version)

Report format of Period report messages:

Protocol Version	Command ID	Longitude	Latitude	GPS Fix Status & Report Type	Reserved	Calorie	Battery Capacity	Date & Time	Beacon ID	Beacon Type	RSSI	Tx Power	Heart Rate
0C 1 byte	0227 2 bytes	4 bytes	4 bytes	1 byte	1 byte	2 bytes	1 byte	4 bytes	20 bytes	1 byte	1 byte	1 byte	1 byte

Skin Temperature	Step	Distance
2 bytes	2 bytes	2 bytes

GPS Fix Status & Report Type:

GPS Fix Status	Report Type
Bit5~Bit7 00=not fix, 01=2D fix, 10=3D fix	Bit0~Bit4 02=period report

Parameters of Report Message

Parameters	Description
Calorie	xx Amount of energy consumed (kcal)
Battery Capacity	xx unit: percent capacity
Longitude	xxx.xxxxxx unit: degree
Latitude	xx.xxxxxx unit: degree
Date &Time	Epoch time from 1970/01/01 Refer to https://en.wikipedia.org/wiki/Unix_time
Beacon ID	iBeacon: UUID + Major ID + Minor ID (20Bytes) Eddystone: Eddystone-UID (Namespace ID + Instance ID) 17~20byte left with zero ALTBeacon : Beacon ID (20Bytes)
Beacon Type	Bit5~Bit7 0: Beacon not available 1: iBeacon 2: Eddystone Beacon 3: ALTBeacon
Step	xxxx Step count
Distance	xxxx Walking distance Unit: meter

For example, the periodic report

0c270243c03d07e2697d014218240356dc1c3c5c00c30052540b67086206

Protocol version: 0C=> 12/10=1.2

Command ID: 2702=>0x0227: Period report

Longitude: 43c03d07=>0x073dc043=>x 121487427 x 0.000001 = 121.487427

Latitude: e2697d01=>0x017d69e2=>24996322 x 0.000001=24.996322

GPS-fix Status: 0x42 => 66 / 32 = 2 => 3D Fix

Report Type: 0x42 => 66% 32= 2 => Periodic mode report

Reserve: 18

Calorie: 2403=>0x0324=804 kcal

Battery Capacity: 0x56 => 86 %

Time: dc1c3c5c =>0x5c3c1cdc=1547443420=>1/14/2019 5:23:40 AM

Beacon ID: 000000000000000000000000000000000000

Beacon Type: 0x00=>0/32=0=> Beacon is not available

RSSI: 0xc3=>-61

Tx Power: 0x00=>0

Heart Rate: 0x52=>82

Temperature: 540b=> 0x0b54=> 2900/100=29°C

Step: 6708=>0x 0867=>2151 steps

Distance: 6206=>0x0662=1634m

Report format of Alarm report messages:

Protocol Version	Command ID	Longitude	Latitude	GPS Fix Status & Alarm Type	Reserved	Reserved	Battery Capacity	Date & Time	Beacon ID	Beacon Type	RSSI	Tx Power	Heart Rate	Skin Temperature
0C 1 byte	0026 2 bytes	4 bytes	4 bytes	1 byte	1 byte	2 bytes	1 byte	4 bytes	20 bytes	1 byte	1 byte	1 byte	1 byte	2 bytes

Step	Distance
2 bytes	2 bytes

GPS Fix Status & Alarm Type:

GPS Fix Status	Alarm Type
Bit5~Bit7	Bit0~Bit4
00=not fix,	01=Help
01=2D fix,	02=Man Down
10=3D fix	08=Low heart rate