

# Extended Protocol for Alcohol Test Results

Alarms are uploaded via the additional information field at position **0x0200**.

The extension follows the additional information definitions in **Table 27 of the Beidou Protocol**.

The extended definitions are shown in **Table 1**.

**Table 1: Extended Definition of Additional Information**

Additional Info ID	Length	Description & Requirements
0x65	—	Driver behavior monitoring alarm information (see Table 2)
0x71	—	Alcohol concentration (see Table 3)

## Driver Behavior Monitoring Alarm

**Table 2: Data Format for Driver Behavior Monitoring Alarm**

Start Byte	Field	Data Type	Description
0	Alarm ID	DWORD	Incremental ID starting from 0, regardless of alarm type
4	Flag Status	BYTE	0x00: Not available 0x01: Start flag 0x02: End flag <i>Only for alarms/events with start &amp; end markers</i>
5	Alarm/Event Type	BYTE	0x01: Fatigue driving 0x02: Handheld phone use 0x03: Smoking 0x04: Not looking forward for long time 0x05: Driver not detected 0x06: Both hands off steering wheel 0x07: Monitoring function failure 0x08–0x0F: User-defined 0x10: Auto capture event 0x11: Driver change event 0x12–0xFF: User-defined 0x20: Alcohol test normal 0x21: Alcohol test incomplete 0x22: Drunk driving 0x23: Severe drunk driving
6	Alarm Level	BYTE	0x01: Level 1 0x02: Level 2
7	Fatigue Level	BYTE	Range 1–10 (higher = more fatigue). Only valid for type 0x01, otherwise 0x00
8	Reserved	BYTE[4]	Reserved
12	Vehicle Speed	BYTE	Unit: km/h (0–250)
13	Altitude	WORD	Unit: meters
15	Latitude	DWORD	Latitude (degrees × 10 <sup>6</sup> )

Start Byte	Field	Data Type	Description
19	Longitude	DWORD	Longitude (degrees × 10 <sup>6</sup> )
23	Date & Time	BCD[6]	Format: YY-MM-DD-hh-mm-ss (GMT+8)
29	Vehicle Status	WORD	Refer to Table 18
31	Alarm Identifier	BYTE[16]	Defined in Table 19

## Alcohol Concentration Data

**Table 3: Alcohol Content Data Format**

Start Byte	Field	Data Type	Description
0	Unit	BYTE	0: mg/100ml1: mg/L2: %3: g/100mL4: %5: μg/100mL6: mg/mL7: g/L8: mcg/L
1	Test Mode	BYTE	1: Active test2: Passive test4: Refused test
2	Alcohol Value	BYTE[5] (ASCII)	Example: 30 2E 33 38 31 → Value: <b>0.381</b>