

# ISO6709

**ISO 6709** *Standard representation of geographic point location by coordinates* is the international standard for representation of latitude, longitude and altitude for geographic point locations.

Buffer with ISO 6709 standard GPS data will be updated every second.

Function to take 3 arguments (latitude, longitude, altitude) and output ISO 6709 format (ex: +27.5916+086.5640+8850).

The required parameter is showed as the I/O element in the Configurator.



This parameter will also be send as the separate I/O element via AVL Data ID 387.

New IO element will be available with [Codec 8 Extended](#) only.

Below, there is listed AVL data package received, with IO element ISO 6709 enabled.

Received data in hexadecimal stream:

```
00000000000000528E010000016F7F183310000F0E51DB209AB6DA0088016608000000000002000
100EF0100000000000000001018300222B3534373031302E323636372B303235323539362E3730303
02B3030302E3133362F0100004C9A Parsed data:
```

## AVL Data Packet

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AVL Data Packet Part	HEX Code Part
Zero Bytes	00 00 00 00
Data Field Length	00 00 00 52
Codec ID	8E
Number of Data 1 (Records)	01

	Timestamp	00 00 01 6F 7F 18 33 10 (GMT: Tuesday, January 07, 2020 08:21:30 AM)
	Priority	00
	Longitude	0F 0E 51 DB
	Latitude	20 9A B6 DA
	Altitude	00 88
	Angle	01 66
	Satellites	08
	Speed	00 00
	Event IO ID	00 00
	N of Total ID	00 02
AVL Data	N1 of One Byte IO	00 01
	1'st IO ID	00 EF (AVL ID: 239, Name: Ignition)
	1'st IO Value	01
	N2 of Two Bytes IO	00 00
	N4 of Two Bytes IO	00 00
	N8 of Two Bytes IO	00 00
	NX of X Byte IO	00 01
	1'st IO ID	01 83 (AVL ID: 387, Name: ISO6709 Coordinates)
	1'st IO Value	2B3534373031302E323636372B303235 323539362E373030302B3030302E3133 362F
	Number of Data 2 (Number of Total Records)	01
	CRC-16	00 00 4C 9A

Server response: 00000001

To parse the data to the correct value use the HEX > ASCII Converter

**Hexadecimal**

**ISO6709 data stream** 2B3534373031302E323636372B303235323539362E373030302B3030302E3133362F

2B converted to the ASCII Code +3534373031302E32363637+303235323539362E37303030+3030302E3133362

	Latitude	Longitude	Altitude
ISO6709 Coordinates parsed	+547010.2667	+0252596.7000	+000.136/

It is possible to use the configurator IO elements Tab, to see the same coordinates values.

