Inateck BCST-70 Communication Protocol

Contents

Raw Data

Unparsed received data in hexadecimal stream

00000000000000A28E0100000181A39E2F7000000000000000000000000000000000010800070002 00EF0101070200040 0B5000000B6000000423DD900430E0100000000000101080 00E
313233303136303030303730393901 0000E25B

AVL Data Packet Part	HEX Code Part
Zero Bytes	00 00 00 00
Data Field Length	00 00 00 A2
Codec ID	8E (Codec 8 Extended)
Number of Data 1 (Number of Total Records)	01
Timestamp	00 00 01 81 A3 9E 2F 70 (Monday, June 27, 2022 4:30:46 PM GMT+00:00)
Priority	00
Longitude	0F 0E 53 AE
Latitude	20 9A B8 6A
Altitude	00 7F
Angle	00 11
Satellites	0D
Speed	00 00
Event IO ID	01 08 (Barcode ID)
N of Total ID	00 07
N1 of One Byte IO	00 02
1’st IO ID	00 EF (AVL ID: 239, Name: Ignition)
1’st IO Value	01
2’nd IO ID	01 07 (AVL ID: 263, Name: BT Status)
2’nd IO Value	02
N2 of Two Byte IO	00 04
1’st IO ID	00 B5 (AVL ID: 181, Name: GNSS PDOP)
1’st IO Value	00 0A
2’nd IO ID	00 B6 (AVL ID: 182, Name: GNSS HDOP)
2’nd IO Value	00 06
3’rd IO ID	42 (AVL ID: 66, Name: External Voltage)

3’rd IO Value	3F C9
4'th IO ID	43 (AVL ID: 67, Battery Voltage)
4'th IO Value	0E 01
N4 of Four Byte IO	00 00
N8 of Eight Byte IO	00 00
NX of X Byte IO	00 01
1’st IO ID	01 08 (AVL ID: 264, Name: Barcode ID)
1’st IO Value	31 32 33 30 31 36 30 30 30 30 37 30 39 39
Number of Data 2 (Number of Total Records)	01
CRC-16	00 00 E2 5B

Parsing Information

Sensor information comes from the AVL IDs mentioned below.

Property ID in AVL packet	Property Name	Bytes	Type	Value range		Multiplier	Units	Description	HW Support	Parameter Group
				Min	Max					

263	BT Status	1	Unsigned	0	4	-	-	0 - BT is disabled 1 - BT Enabled, not device connected 2 - Device connected, BTv3 Only 3 - Device connected, BLE only 4 - Device connected, BLE + BT	FMBXXX FMB001 FMC001 FMB010 FMB110 FMB120 FMB122 FMB125 FMU125 FMC125 FMM125 FMB130 FMU130 FMC130 FMM130 FMB140 FMB150 FMC150 FMM150 FMB900 FMB920 FMB962 FMB964 FM3001 FMB202 FMB204 FMB206 FMT100 MTB100 FMC800 FMM800 FMM80A	Permanent I/O elements

264	Barcode ID	Variable	ASCII	0	32	-	-	Barcode ID	FMBXXX FMB001 FMB010 FMB110 FMB120 FMB122 FMB125 FMU125 FMC125 FMM125 FMB130 FMU130 FMC130 FMM130 FMB140 FMB150 FMC150 FMM150 FMB900 FMB920 FMB962 FMB964 FM3001 FMB202 FMB204 FMB206 FMT100 MTB100	Permanent I/O elements

Parsing AVL ID 264 data

Example:

Hex Data from ID 264: **31 32 33 30 31 36 30 30 30 30 37 30 39 39**

Eliminate **3** from the header would make the data look likes this

Barcode ID: **12301600007099**

Actual Barcode Scanned

Demonstration in Flespi Platform

Flespi: Open Flespi application → Select Telematics Hub→ Select Devices → Select the FM device → Select Barcode.id → to access all the information.