

# Which data protocol to choose Codec 8 or Codec 8 Extended

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## Recommendation

We strongly recommend all clients to use Codec 8 Extended protocol, in order to be able to use all device features.

### Reason to choose Codec 8 Extended

- **Codec 8** supports max I/O elements up to 255 [AVL ID](#). Although this standard is older, it was left as an option for clients that have already integrated this protocol into their platforms.
- **Codec 8 Extended** supports 2 bytes, 65 535 AVLs.

For example, **Codec 8** does not support [AVL ID](#) 385, which is an ID for **Beacon ID**, while **Codec 8 Extended** supports all ID's that are listed on [AVL ID](#) page.

For more information about Codec 8 Extended protocol visit: [Codec 8 Extended](#)

### Differences between Codec 8 and Codec 8 Extended

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	Codec8	Codec8 Extended
Codec ID	0x08	0x8E
AVL Data IO element length	1 byte	2 bytes
AVL Data IO element total IO count length	1 byte	2 bytes

AVL Data IO element IO count length	1 byte	2 bytes
AVL Data IO element AVL ID length	1 byte	2 bytes
Variable size IO elements	Does not include	Includes variable size elements

*Note: Both Codec 8 and Codec 8 Extended are transferring periodic data.*

## Setting up your configuration to use Codec 8 Extended protocol

### System panel

- Set **Data Protocol** to **Codec 8 Extended**. This way, the device will be able to include 2 byte length AVL IO elements instead of 1 byte, so more parameters whose AVL ID is higher than 255 could be included to the packet.
- Save the changes to the device.



System panel

More information about *System* panel and it's parameters for each device can be found here:

[TST100](#) | [TFT100](#) | [GH5200](#) | [TMT250](#)