2 types of can bus standards:

|  |  |  |
| --- | --- | --- |
|  | ISO 11898-2 | ISO 11898-3 |
| Bit rate | up to 1 Mbit/s | up to 125 kbit/s |
| Topology | linear bus terminated at each end with 120 Ω resistors | linear bus, star bus or multiple star buses connected by a linear bus and is terminated at each node by a fraction of the overall termination resistance. The overall termination resistance should be close to, but not less than, 100 Ω. |
| Fault tolerance | Low | High |
|  | A screenshot of a computer program  Description automatically generated | A screenshot of a computer  Description automatically generated |

|  |  |  |  |
| --- | --- | --- | --- |
| Component | Voltage | Regulated? | Max current |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

### RS485 vs CAN

|  |  |  |
| --- | --- | --- |
|  | CAN bus | RS485 |
| Tx waveform | A diagram of a car  Description automatically generated | A black and blue rectangles  Description automatically generated |
| Tx differential values | A diagram of different types of electrical components  Description automatically generated | A diagram of different types of electrical components  Description automatically generated |
| Rx differential values | A diagram of a rectangular box with arrows  Description automatically generated with medium confidence | A diagram of different types of electronic components  Description automatically generated |
| Data rate | ~5Mbs | 100Mbs |
| CMR – common mode rangw | -2v to 7v standard -25v to 25v special | -7v to 12v  -25v to 25v special |
| Internal overvoltage circuit | + | + |
| Handling message contention | Protocol embedded arbitration between devices according to pre-defined priority levels | None |
| Error message checking | Protocol embedded | None |