3.5.8 CAN Network

Serial Pins on Controller			
Pin	**Meaning**	**Pin**	**Meaning**
K3 - 2	CAN - L	**K3 - 3**	CAN - H
K3 - 3	CAN - L RES	**K3 - 9**	CAN - H RES

Wiring

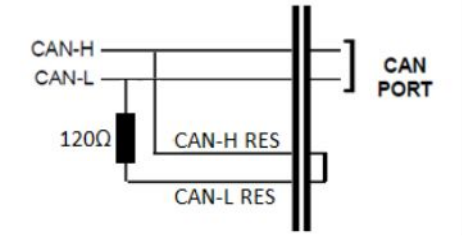
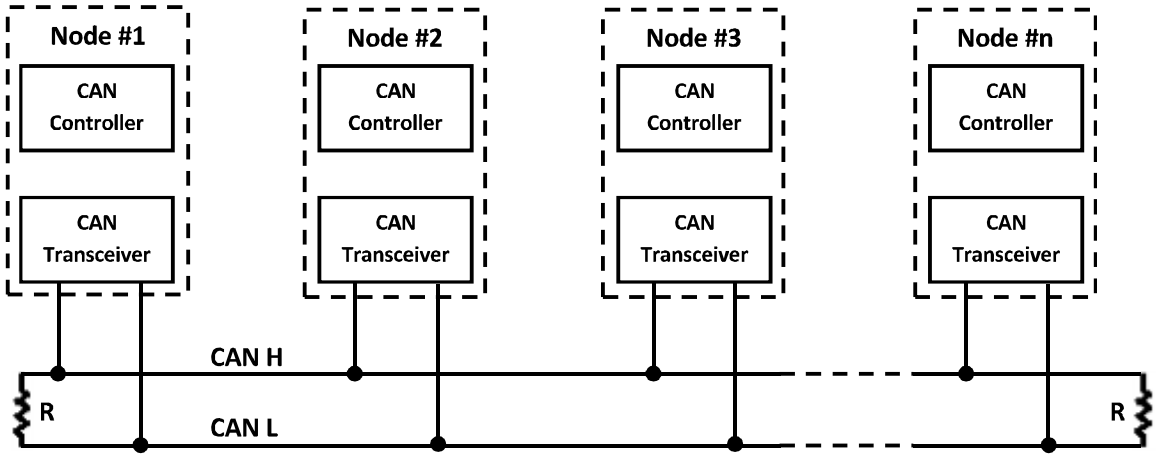


Figure 136 *- CAN Network Wiring*

The High-Speed ISO 11898 Standard specifications are given for a maximum signaling rate of 1 Mbps with a bus length of 40m and a maximum of 30 nodes. It also recommends a **maximum un-terminated stub length of 0.3m**. The cable is specified to be a shielded twisted-pair with a 120Ω characteristics impedance (Z_0). The Standard defines a single line of twisted-pair cable with the network topology as shown in the following picture:



It's terminated at both ends with 120Ω resistors in order to adapt the lines to a fixed impedance, avoiding reflections or other problems that can occur at high frequency of CAN (from 125KBaud to 1Mb). Placing these resistors on a node should be avoided since the bus line loses termination if the node is disconnected from the bus.

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