

	MECHATROLINK-II	MECHATROLINK-III
Physical Layer	Equivalent to RS-485	100Base-T
Baud Rate	10Mbps	100Mbps
Transmission Cycle	250 usec to 8 ms	31.25 usec to 64 ms
Number of slaves	30 max	62 max
Packet Size	17/32 bytes	8/16/32/48/64 bytes
Minimum Distance between Nodes	0.5 m	0.2 m
Maximum Distance between Nodes	The total length of the network must be less than 30m without a repeater or 50m with a repeater.	100m between nodes.
Topology	Bus	Cascade, star or point to point
Event Driven Communication	No	Yes
Unpowered Node	Nodes do not actively participate in the communication, so an unpowered node does not affect communication between other nodes.	Nodes are responsible for passing packets through the network. If a node is not powered and is in between the controller and other nodes, it will block communication between the controller and the other nodes.
Minimum Transmission Cycle Dependency on Topology	The minimum transmission cycle depends on the number of nodes and the packet size.	The minimum transmission cycle depends on number of nodes, the topology, the cable lengths and the packet size.