

# Nessum WIRE vs. SPE(Single Pair Ethernet) / Ethernet

	Nessum	SPE (Single Pair Ethernet)				Ethernet
	Nessum WIRE	10BASE-T1S	10BASE-T1L	100BASE-T1	1000BASE-T1	1000BASE-T
<b>Standard</b>	IEEE 1901	IEEE 802.3cg	IEEE 802.3cg	IEEE 802.3bw	IEEE 802.3bp	IEEE 802.3ab
<b>Communication Speed</b>	Several to Several tens [Mbps]*	10 Mbps	10 Mbps	100 Mbps	1000 Mbps	1000 Mbps
<b>Connection</b>	Point-to-Multipoint <b>(Free Topology, 1024 nodes)</b>	Point-to-Point (Star)  Point-to-Multipoint (Multidrop, 8 nodes)	Point-to-Point (Star)	Point-to-Point (Star)	Point-to-Point (Star)	Point-to-Point (Star)
<b>Communication Distance</b>	Several [km]*	25 m	1000 m	UTP : 15 m STP : 40 m	UTP : 15 m STP : 40 m	100 m
<b>Transmission</b>	Half Duplex	Half Duplex	Full Duplex	Full Duplex	Full Duplex	Full Duplex
<b>Cable</b>	<b>Any type of cable No new wiring</b>	SPE cable	SPE cable	SPE cable	SPE cable	Ethernet cable (Cat 5)

\* Depends on the type of cable and communication environment