

RS-Type

Characteristics of RS232, RS422, RS423 and TIA(RS)-485

	RS232	RS423	RS422	TIA(RS)-485
Differential	no	no	yes	yes
Max number of drivers	1	1	1	32
Max number of receivers	1	10	10	32
Modes of operation	half duplex full duplex	half duplex	half duplex	half duplex
Network topology	point to point	multidrop	multidrop	multipoint
Max distance (acc. standard)	15 m	1200 m	1200 m	1200 m
Max speed at 12m	20 kbs	100 kbs	10 mbs	35 mbs
Max speed at 1200 m	(1 kbs)	1 kbs	100 kbs	100 kbs
Max slew rate	30 V/ μ s	adjustable	n/a	n/a
Receiver input resistance	3..7 k Ω	\geq 4 k Ω	\geq 4 k Ω	\geq 12 k Ω
Driver load impedance	3..7 k Ω	\geq 450 k Ω	100 Ω	54 Ω
Receiver input sensitivity	\pm 3 V	\pm 200 mV	\pm 200 mV	\pm 200 mV
Receiver input range	\pm 15 V	\pm 12 V	\pm 10 V	-7..12 V
Max driver output voltage	\pm 25 V	\pm 6 V	\pm 6 V	-7..12 V
Min driver output voltage (with load)	\pm 5 V	\pm 3.6 V	\pm 2.0 V	\pm 1.5 V