

Protocol Selection Table

Bender offers signal line protection devices for many different communication and signal protocols. Use the table below to know which protectors must be used for a good surge protection.

Selection table			
Protocol	Signal	Bender Surge protector	
I/O	± 5 VDC, < 250kHz	NSL7v5-G	NSLT1-7v5
I/O	± 12 VDC, < 250kHz	NSL18-G	NSLT1-18
I/O	± 24 VDC, < 250kHz	NSL36-G	NSLT1-36
I/O	0-20mA / 4-20mA	NSL420-G	NSLT1-36
I/O	RS-232	NSL-DH	
I/O	RS-422	NSL485-EC90 (x2)	
I/O	RS-452	NSL485-EC90 (x2)	
I/O	RS-485	NSL485-EC90	
I/O	1-Wire	NSL485-EC90	

Protocol	Signal	Bender Surge protector	
10/100/1000BaseT	Ethernet	NTP-RJ45-xCAT6	
AS-i	32 VDC 1-pair	NSL36-G	NSLT1-36
BACnet	ARCNET / Ethernet / BACnet/IP	NTP-RJ45-xCAT6	
BACnet	RS-232	NSL-DH	
BACnet	RS-485	NSL485-EC90	
BitBus	RS-485	NSL485-EC90	
CAN Bus (Signal)	5 VDC 1-Pair	NSL485-EC90	
C-Bus	36 VDC 1-pair	NSSP6A-38	
CC-Link/LT/Safety	RS-485	NSL485-EC90	
CC-Link IE Field	Ethernet	NTP-RJ45-xCAT6	
CCTV	Power over Ethernet	NTP-RJ45-xPoE	
DALI	Digital Serial Interface	NSL36-G	NSLT1-36
Data Highway/Plus	RS-485	NSL485-EC90	
DeviceNet (Signal)	5 VDC 1-Pair	NSL7v5-G	NSLT1-7v5
DF1	RS-232	NSL-DH	
DirectNET	RS-232	NSL-DH	
DirectNET	RS-485	NSL485-EC90	
Dupline (Signal)	5 VDC 1-Pair	NSL7v5-G	NSLT1-7v5
Dynalite	DyNet	NTP-RJ45-xCAT6	
EtherCAT	Ethernet	NTP-RJ45-xCAT6	
Ethernet Global Data	Ethernet	NTP-RJ45-xCAT6	
Ethernet Powerlink	Ethernet	NTP-RJ45-xCAT6	

Protocol	Signal	Bender Surge protector	
FIP Bus	RS-485	NSL485-EC90	
FINS	Ethernet	NTP-RJ45-xCAT6	
FINS	RS-232	NSL-DH	
FINS	DeviceNet (Signal)	NSL7v5-G	NSLT1-7v5
FOUNDATION Fieldbus H1	32 VDC 1-pair	NSSP6A-38-G	NSLT1-36
FOUNDATION Fieldbus HSE	Ethernet	NTP-RJ45-xCAT6	
GE-SRTP	Ethernet	NTP-RJ45-xCAT6	
HART	4-20mA + HF Data	NSL-DH	
HostLink	RS-232	NSL-DH	
HostLink	RS-422	NSL485-EC90 (x2)	
Interbus	RS-485	NSL485-EC90	
ISDN	PSTN	NSL-PSTN	NSL-iSwitch
KNX TP0/1	30 VDC 1-pair	NSL36-G	NSLT1-36
KNXnet/IP	Ethernet	NTP-RJ45-xCAT6	
MODBUS	RS-485	NSL485-EC90	
MODBUS TCP	Ethernet	NTP-RJ45-xCAT6	
P-Net	RS-485	NSL485-EC90	
PieP	Ethernet	NTP-RJ45-xCAT6	
Power over Ethernet	Power over Ethernet	NTP-RJ45-xCAT6	
Process Bus (P-Bus)	RS-485	NSL485-EC90	
Profibus DP/FMS	RS-485	NSL485-EC90	
Profibus PA	32 VDC 1-pair	NSL36-G	NSLT1-36
Profinet IO	Ethernet	NTP-RJ45-xCAT6	
PSTN	POTS	NSL-PSTN	NSL-iSwitch
S-Bus	32 VDC 1-pair	NSL36-G	NSLT1-36
Sercos III	Ethernet	NTP-RJ45-xCAT6	
Sinec H1	Ethernet	NTP-RJ45-xCAT6	
SynqNet	Ethernet	NTP-RJ45-xCAT6	
TTEthernet	Ethernet	NTP-RJ45-xCAT6	
xDSL	PSTN	NSL-PSTN	NSL-iSwitch

