

# SPIDERLAN

## PC/104-Plus Ethernet-Switch Module with 8 Ports

### General Description

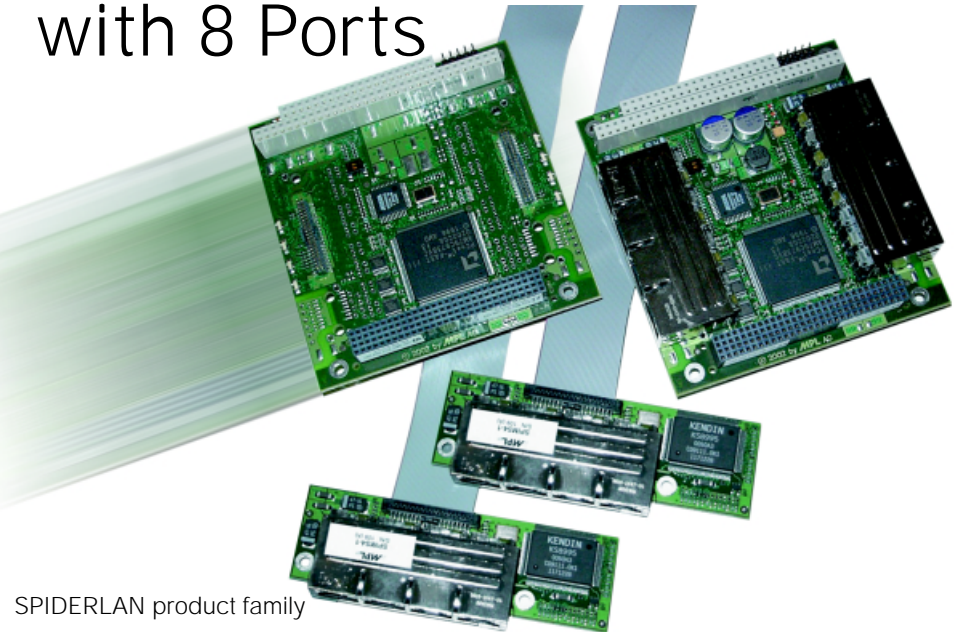
The SPIDERLAN-Family consists of universal high performance, compact and robust Ethernet Switch modules for industrial use. With a single PC/104-Plus module your system can be expanded with up to 2 ethernet controllers, each combined with a 5 port ethernet switch. So the board comes with up to eight fully independent operating external 10/100BASE-TX ports, available on RJ45 connectors. Each switch automatically determines and remembers where an Ethernet device is located and routes packets only to the appropriate port. This minimizes network loading, eliminates collisions and enables true deterministic communications over Ethernet. The SPIDERLAN is available as compact single PC/104-Plus module or as expandable version for front panel assemblies!

### SPIDERLAN specialties

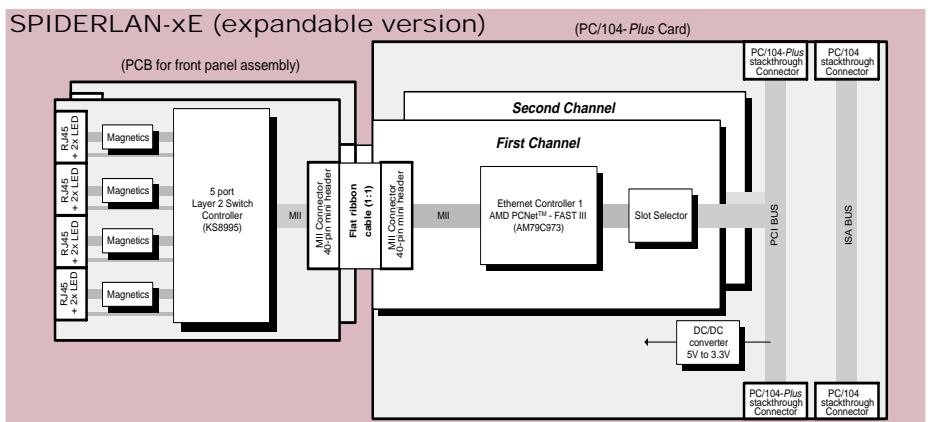
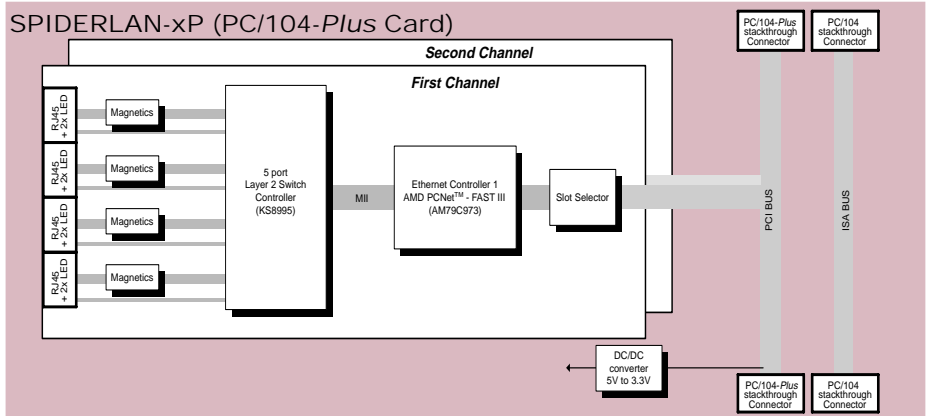
- Up to two 5 port Layer 2 switches
- Up to eight 10/100BASE-TX ports
- MDI/MDI-X auto crossover
- Up to two Fast Ethernet controllers
- All on a single PC/104-Plus module
- Expandable front panel assembly
- Runs with 5V input power only

### Those features make

the SPIDERLAN-Family to the perfect solution in industrial applications where a reliable network is required. SPIDERLAN makes setting up an industrial network easy! The product is used in applications like servers, gateways, routers, firewalls and more.



SPIDERLAN product family



# Technical Features SPIDERLAN

## Electrical

Ethernet Switch	5-port Layer 2 Switch Controller 1.4 Gbps high performance bandwidth Independent operation	up to two switch controllers each with 128KB SRAM automatic address learning, aging and migration
Network Controller	PCnet™-FAST III Ethernet Controller Each direct connected to one switch	up to two ethernet controllers
Physical Interface (PHY)	10BASE-T and 100BASE-TX onboard or on external PCB Supports IEEE 802.3u autonegotiation	up to 8 external RJ45 connectors  10/100Mbps, half/full-duplex operation
Media Independent Interface (MII)	Used to connect Ethernet and Switch controller together	expanded version uses 1:1 cable cable length 25 cm
Status LED's	2 LED's for each channel	user configurable
Ethernet Host Interface	PC/104-Plus compliant PCI specification revision 2.2 compliant	stackthrough module supports both 5.0V and 3.3V signaling
Power	Runs with 5V input power only	5V/3.3V converter onboard

## Physical / power

Size (length x width x height)	90.2 x 95.9 x 11 mm 3,550 x 3,775 x 0,435 inch	PC/104-Plus compliant stackthrough module
Weight	120g / 0.265 lbs	fully equipped SPIDERLAN-2P
Power	+5VDC ± 5%	input over PCI connector
Power consumption	Typically 2.5W Typically 5W	SPIDERLAN-1P/E (4-port switch) SPIDERLAN-2P/E (8-port switch)
Temperature Range	0°C up to 70°C	optional -40°C up to 75°C
Humidity	10% - 90% non condensing	optional coating available

## Operating systems

Compatible with the existing PCnet™ Family driver and diagnostic software!

- Microsoft Windows NT 3.51, 4.0, 2000
- Microsoft Windows 95, 98, ME, XP
- Microsoft Windows CE
- Novel NetWare 3.11, 3.12 & 4.1x, 5 Server
- Packet driver for Unix Client, UnixWare 7.0, SCO Unix
- Linux (Red Hat, Caldera, SlackWare, S.U.S.E, Debian ...)
- Macintosh Mac OS 8.x/9.x

## SPIDERLAN versions

Product number	Number of Ethernet and Switch controller	External ports on RJ45	
		PC/104-Plus Board	Expansion Board/s
SPIDERLAN-1P	1	4	
SPIDERLAN-1E	1		4
SPIDERLAN-2P	2	8	
SPIDERLAN-2E	2		8

Please note, not always all versions are available from stock.

Beside the SPIDERLAN Family, MPL provides a LAN104 product line with industrial single and dual PC/104-Plus Ethernet modules with either RJ45, 2.54 mm header or MII interface.

For further customer specific versions please contact MPL.

MPL AG is an ISO9001 certified company



Täferstrasse 20  
CH-5405 Baden-Dättwil  
Tel. +41 (0)56 483 34 34  
Fax +41 (0)56 493 30 20  
Email: info@mpl.ch  
Home page: www.mpl.ch