DATASHEET

Interface modules

Use in connection with SH ARC-PC104, SH ARC-ISA-HUB, SH ARC-M3-HUB, SH ARC-PCMCIA, SH ARC-PCIe-M, SH ARC-PCIu-M, SH ARC-PCI104 and SH ARCALYZER

Module type "PCMCIA", SH KOAX-PCMCIA

Application & Functionality

The interface modules – in connection with the SH ARC-ISA-HUB (previons name SH FARC-H3/5), SH ARC-PC104, SH ARC-PCI104, SH ARC-PCMCIA and SH ARCALYZER card as well as ARCNET hubs of the type SH ARC-M3-HUB for ARCNET network expansions – connect the various transfer media such as coaxial cables, optical wires and twisted pair cables. Connected to SH ARCALYZER they are used to analyze networks.

For use with the SH ARC-ISA-HUB the modules are supplied with a slot cover for PCs; they are then connected to the ARCNET cards via flat ribbon cables. Each module is supplied with a slot cover. If required 2 modules per slot may be installed.

For use with SH ARC-PC104 or SH ARC-PCI104 the modules are supplied without slot cover.

To connect to PCMCIA cards (SH ARC-PCMCIA and SH ARCALYZER) the modules are also available in an aluminum housing. For use with modular hubs the modules are supplied with front plates.

The design according to EMC standards allows the use in rough industrial environments.

Specification

Compatibility	ANSI/ATA 878.1, CE
Temperature range, operation	0°C to +55°C
Temperature range, storage	-20°C to +85°C
Dimensions type (w/h/d) in mm, without connectors	42/20/90 (type "PC" and "PC104") 55/23/102 (type "PCMCIA") 55/24/94 (type "M")

Key features coax and TWP module

Bit rate 2.5 Mbit/s

Switchable termination resistance

LED activity and status display

Key features RS485 module

Bit rate 0..10 Mbit/s

Galvanically insulated

Switchable termination

LED activity and status display
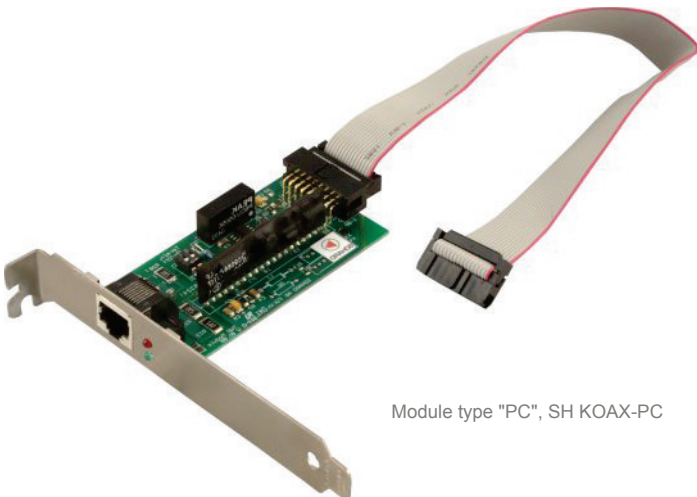
Key features fiber optic module

Bit rate to max 2.5 Mbit/s

SMA (screw), ST (bayonet), single mode or TOSLINK connectors available performances and adaptivity

4 Optical output power levels

LED activity and status display

Coax module

Power supply	+5 V / <600 mA
Transmission rate	2.5 Mbit/s
Input impedance	≥1 kOhm @ f = 5 Mhz
Output voltage	min. 16 Vss on term. 93 Ohm line
Output signal	sine dipulse 200(50) ns acc. to ANSI/ATA 878.1
Connector	insulated BNC
Cabling	RG62 coax cable

RS485 module

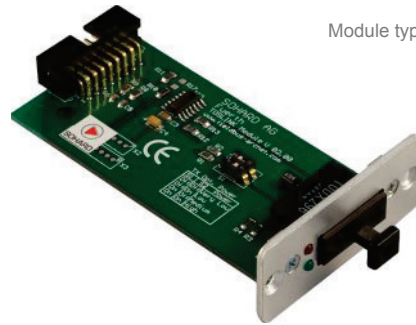|	
Power supply	+5 V / <400 mA
Transmission rate	0..10 Mbit/s
Input level	+/- 200 mV
Polarity idle	positive
Input impedance	120 Ohm (with DC biasing) switchable via dip switch
DC biasing	activated via dip switch, 240 Ohm +5V / 240 Ohm 0V
Transmission level	min. +/- 3.0V
Connector	D-Sub, 9 pin, female

Module type "PC", SH KOAX-PC

TWP module

Power supply	+5 V / <600 mA
Transmission rate	2.5 Mbit/s
Input impedance	≥1 kOhm @ f = 5 Mhz
Output voltage	min. 16 Vss (20 Vss at 10 Mbit/s) on term. 120 Ohm line
Output signal	sine dipulse 200(50) ns acc. to ANSI/ATA 878.1
Connector	RJ45 with metal shield
Cabling	shielded twisted pair line with 100..120 Ohm impedance

Fiber optic module (ST and SMA)

Power supply	+5 V / <200 mA
Transmission rate	0..2.5 Mbit/s
Receiver sensitivity	min. –25.5 dbmW, max. –9.2 dbmW
Optical output power	typ. –14 dbmW with 50 µm fiber 4 power grades selectable
Wave length	max. 820 nm
Connector	2 x SMA or 2 x ST plug
Cabling	fiber type 50/125 or 62.5/125 or 100/140 µm

Module type "M", SH LWLSMA-M

Fiber optic module (TOSLINK)

Power supply	+5 V / <200 mA
Transmission rate	0..2.5 Mbit/s
Receiver sensitivity	min. –31 dbmW, max. –14 dbmW
Optical output power	min -20 dbmW, max. –14 dbmW with 200 µm fiber 4 power grades selectable
Wave length	max. 800 nm
Connector	JIS2 F07/TOSLINK duplex plug
Cabling	fiber type 200/230 µm

Module type "PC104", SH RS485-PC104

Interface modules type "M" (for SH ARC-M3-HUB)

Order name	Bit rate	Short description
SH KOAX-M	2.5 Mbit/s	Coaxial interface module type „M" with BNC socket
SH LWLSM-M	0..2.5 Mbit/s	Optic fiber interface module type „M", single mode with ST socket
SH LWLSMA-M	0..2.5 Mbit/s	Optic fiber interface module type „M" with SMA socket
SH LWLST-M	0..2.5 Mbit/s	Optic fiber interface module type „M" with ST socket
SH LWLTOS-M	0..2.5 Mbit/s	Optic fiber interface module type „M" with TOSLINK socket
SH RS485-M	0..10 Mbit/s	RS485 interface module type „M" with D-Sub socket
SH TWP-M	2.5 Mbit/s	TWP interface module type „M" with RJ45 socket

Interface modules type "PC" (for SH ARC-PCIe-M, SH ARC-PCIu-M, SH ARC-ISA-HUB)

Order name	Bit rate	Short description
SH KOAX-PC	2.5 Mbit/s	Coaxial interface module type „PC" with BNC socket
SH LWLSM-PC	0..2.5 Mbit/s	Optic fiber interface module type „PC", single mode with ST socket
SH LWLSMA-PC	0..2.5 Mbit/s	Optic fiber interface module type „PC" with SMA socket
SH LWLST-PC	0..2.5 Mbit/s	Optic fiber interface module type „PC" with ST socket
SH LWLTOS-PC	0..2.5 Mbit/s	Optic fiber interface module type „PC" with TOSLINK socket
SH RS485-PC	0..10 Mbit/s	RS485 interface module type „PC" with D-Sub socket
SH TWP-PC	2.5 Mbit/s	TWP interface module type „PC" with RJ45 socket

Interface modules type "PCMCIA" (for SH ARC-PCMCIA, SH ARCALYZER-PCMCIA)

Order name	Bit rate	Short description
SH KOAX-PCMCIA	2.5 Mbit/s	Coaxial interface module type „PCMCIA" with BNC socket
SH LWLSM-PCMCIA	0..2.5 Mbit/s	Optic fiber interface module type „PCMCIA", single mode with ST socket
SH LWLSMA-PCMCIA	0..2.5 Mbit/s	Optic fiber interface module type „PCMCIA" with SMA socket
SH LWLST-PCMCIA	0..2.5 Mbit/s	Optic fiber interface module type „PCMCIA" with ST socket
SH LWLTOS-PCMCIA	0..2.5 Mbit/s	Optic fiber interface module type „PCMCIA" with TOSLINK socket
SH RS485-PCMCIA	0..10 Mbit/s	RS485 interface module type „PCMCIA" with D-Sub socket
SH TWP-PCMCIA	2.5 Mbit/s	TWP interface module type „PCMCIA" with RJ45 socket

Interface modules type "PC104" (for SH ARC-PC104, SH ARC-PCI104, SH ARC-PC104-HUB)

Order name	Bit rate	Short description
SH KOAX-PC104	2.5 Mbit/s	Coaxial interface module type „PC104" with BNC socket
SH LWLSM-PC104	0..2.5 Mbit/s	Optic fiber interface module type „PC104", single mode with ST socket
SH LWLSMA-PC104	0..2.5 Mbit/s	Optic fiber interface module type „PC104" with SMA socket
SH LWLST-PC104	0..2.5 Mbit/s	Optic fiber interface module type „PC104" with ST socket
SH LWLTOS-PC104	0..2.5 Mbit/s	Optic fiber interface module type „PC104" with TOSLINK socket
SH RS485-PC104	0..10 Mbit/s	RS485 interface module type „PC104" with D-Sub socket
SH TWP-PC104	2.5 Mbit/s	TWP interface module type „PC104" with RJ45 socket

It is delivered only interface module. Please feel free to contact as for customized interface modules.