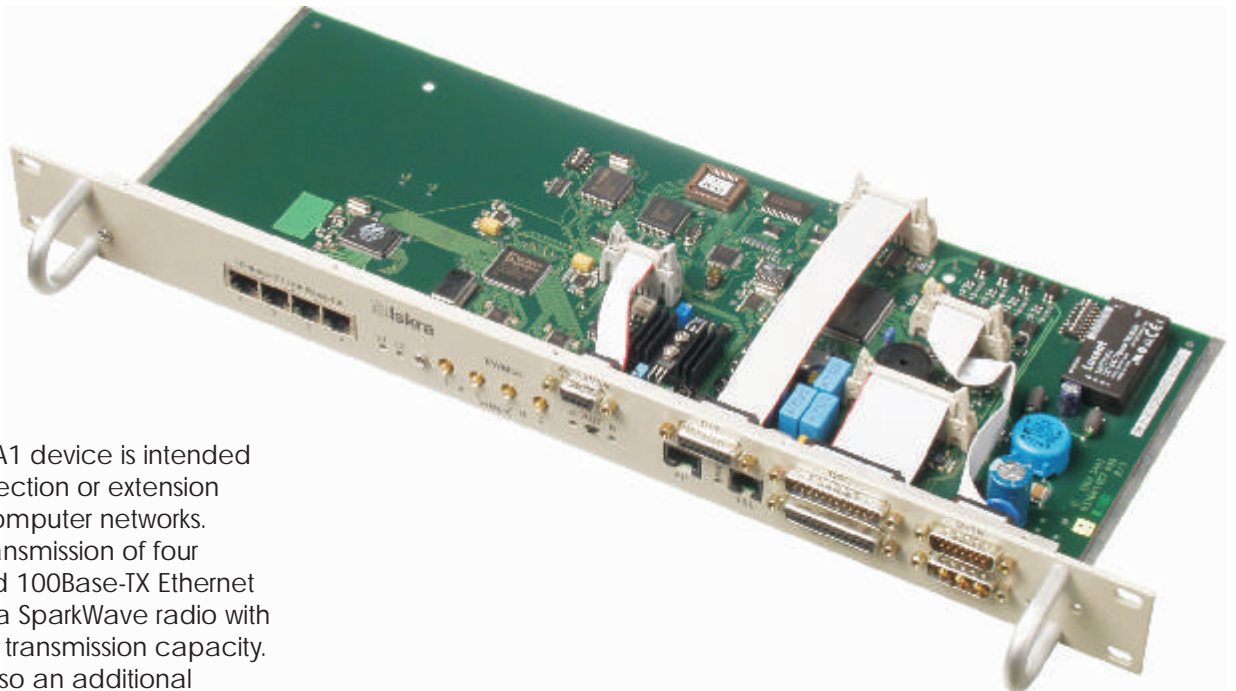


EWM34 A1

Ethernet Signal
Transmission over Radio



The EWM34 A1 device is intended for the connection or extension of existing computer networks. It enables transmission of four 10Base-T and 100Base-TX Ethernet signals over a SparkWave radio with 34Mbit/s (E3) transmission capacity. It provides also an additional E1 channel (2Mbit/s).

Ethernet signal transmission by the EWM34 A1 can exploit all the advantages of the SparkWave radio family and SparkView network element management.

SPARKWAVE
digital microwave radio





SparkWave GA

EWM34 A1



The EWM34 A1 device has four Ethernet interfaces that can be automatically adapted to different transmission speed (10 or 100Mbit/s), half or full duplex transmission mode and cable signal arrangement. These features give the device real "plug and play" connection possibilities. Transmission speed and traffic activity is indicated by two LEDs on each port. The device is designed in accordance with IEEE 802.3 standards and has Ethernet switch functionality. The overall Ethernet signal transmission capacity is 34Mbit/s (E3).

A G. 703 double connector is on the line side of the EWM34 A1 device. Transmission of Ethernet signals can be performed by any E3 radio of the SparkWave family. A device of any frequency band (7, 8, 15, 18, 23 and 38 GHz) can be chosen. The unit has also an EOW block where an additional channel of 4Mbit/s capacity can be added to the E3 signal. Over this channel different signals can be transmitted (an additional 2Mbit/s, digital service channels up to 512kbit/s, a voice channel, a supervision channel for SparkView, etc.). In most cases the reliability of the link is high enough to ensure transmission without protection (1+0). Where higher reliability is required one of the protection configurations with a hitless switch, built in the EWM34 A1 unit, can be used.

The EWM34 A1 device can be directly connected to the SparkView EMS and NEMS, where it can be configured and managed as a network element.

Technical data

Ethernet interface	4x ETH 802.3 10Base-T/100Base-TX interface RJ-45 Automatic network adapting (10/100 Mbit/s, full/half duplex) Traffic filtering on MAC level (the switch can remember up to 2,048 MAC addresses) Adjustable time interval length for MAC addresses storing 1 Mbit/s Ram for Ethernet packets storing.
E3 interface	2x HDB3 input and output connector (ITU-Rec. G. 703 Clause 8, speed 34,386 Mbit/s, nominal impedance 75?)
EOW interface	The same data as EOW channels of SparkWave family members for medium capacity radio systems (SYM34, SWM34, MXM216) transmission of analogue and digital service channels and additional E1 channel
Power supply	-40,5V to -72V (ETS 300.132)
Power consumption	< 6W
Climatic conditions	ETS 300.019 class 3.1
Mechanical design	19" subrack