

### EYM34 A1

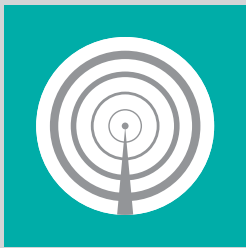
Ethernet Signal  
Transmission over Radio



The EYM34 A1 Ethernet system module is an SYM34 extended radio system module for transmission of Ethernet signals over E3 microwave radio links. It has four 10/100Mbit/s Ethernet interfaces. It provides also an additional E1 channel (2Mbit/s). The EYM34 A1 is intended to connect and extend existing computer networks over microwave radio links. The device is directly compatible with the SparkView network element management system.

**SPARKWAVE**  
digital microwave radio





# SparkWave GA

## EYM34 A1



The EYM34 A1 Ethernet system module is used as an alternative to the SparkWave family SYM34 system module. The module performs mapping and demapping of four 10/100Mbit/s Ethernet signals in a 34Mbit/s bi-directional data stream. It contains a service block (EOW), which is identical to the EOW block of the SYM34 A1 system module. The EYM34 A1 module can work only in the unprotected (1+0) mode.

Physical interfaces automatically adapt to the network speed (10 or 100Mbit/s), transmission mode (full or half duplex) and cable crossing. This gives the module a real "plug and play" functionality. In the switch the first and the second level of OSI reference model is realized, which gives the module a possibility of selective traffic distribution to the single ports based on MAC addresses. The module contains 1Mbit RAM for temporary packet storage and has a possibility of storing up to 2,048 MAC addresses. The status of each Ethernet interfaces is shown with two LEDs, which display speed and traffic activity on the interface.

The EYM34 A1 module is connected via coaxial cable directly to an RF unit of the SparkWave family. A device of any frequency band (7, 8, 15, 23 and 38 GHz) can be chosen. The unit has also an EOW unit where an additional 4Mbit/s channel can be added to the E3 signal. Over this channel different signals can be transmitted (an additional 2Mbit/s, digital service channel up to 512kbit/s, a voice channel, a supervision channel for SparkView, etc.) The EOW module also allows voice conferencing. The module provides four static inputs and four static outputs. Static outputs can be configured as potential free outputs or be used for 7R signaling. All connectors are available on the front panel.

## Technical data

<b>Ethernet interface</b>	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 storing of Ethernet packets.
<b>Service unit (EOW)</b>	The same data as for 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
<b>E3 interface</b>	2x HDB3 input and output connector (ITU-Rec. G. 703 Clause 8, speed 34,386 Mbit/s, nominal impedance 75Ω)
<b>Connection to the RF SparkWave part</b>	coaxial cable
<b>Power supply</b>	-40,5V to -72V (ETS 300.132)
<b>Power consumption</b>	<6W
<b>Climatic conditions</b>	ETS 300.019 class 3.1
<b>Mechanical design</b>	19" subrack