

1.1. ETHERNET SWITCH UNIT EES-X16 (OPTION)

EES-X16 is an optional plug-in card, usually installed in slot #14 of the UAR-x14 shelf. It aggregates the IP traffic from all COT cards in the shelf for systems working in configuration #2 and/or #3. Connection to COT card is done by means of straight Ethernet cables with RJ-45 connectors. VLAN settings are possible by means of DIP switch. For downlink to COT units EES-x16 features 13 10/100 BaseTX Ethernet ports accessible from the top side of the unit when inserted in UAR-x14 shelf. Three (3) uplink 100BaseTX Ethernet ports are available on front panel (EES-016). Optionally also optical GE uplink is available for MultiMode (EES-M16) and SingleMode fiber (EES-S16).

1.1.1. CONFIGURING EES-X16 WITH DIP SWITCHES

By means of DIP switches SW1, SW2, SW3 on EES-x16 board it is possible to configure Ethernet switch. Follow default setting for normal application with EMX in configuration #2 and #3, which supports subscriber separation on level 2 and quality of service QoS. See Table **Ошибка! Текст указанного стиля в документе отсутствует.**-1, Table **Ошибка! Текст указанного стиля в документе отсутствует.**-2 and Table **Ошибка! Текст указанного стиля в документе отсутствует.**-3.

In default setting uplink is on port 16, see Figure 3 !

More information available on request from IPS technical support team.

SW1

1	ENTRUNK1
ON	
OFF (default)	
2	ENTRUNK0
ON	
OFF (default)	
3	ENVLAN
ON (default)	Port-VLAN enabled.
OFF	
4	VLANTYPE
ON	
OFF (default)	
5	FXHALFDUP
ON	
OFF (default)	
6	DISFXLOWCTRL
ON	
OFF (default)	
7	Not used
ON	
OFF (default)	
8	Not used
ON	
OFF (default)	

Table **Ошибка! Текст указанного стиля в документе отсутствует.**-1: configuration of EES-x16 (SW1)

SW2

1	ENBKP
ON	
OFF (default)	
2	BKPMODE
ON	
OFF (default)	
3	ENPORTPRI1
ON	
OFF (default)	
4	ENPORTPRI0
ON	
OFF (default)	
5	EN802.1P
ON(default)	
OFF	
6	ENDS
ON(default)	
OFF	
7	ENTRUNK3
ON	
OFF (default)	
8	ENTRUNK2
ON	
OFF (default)	

Table **Ошибка! Текст указанного стиля в документе отсутствует.**-2: configuration of EES-x16 (SW3)

SW3

1	ENBKP28ONE
ON	
OFF (default)	
2	ACCEPTERR
ON	
OFF (default)	
3	ENFCAUTOOFF
ON	
OFF (default)	
4	QWEIGHT0
ON	
OFF (default)	
5	QWEIGHT1
ON	
OFF (default)	
6	802.1DFILTER
ON (default)	
OFF	
7	ENBRDCTCTRL
ON (default)	
OFF	
8	FDFCTRL
ON	
OFF (default)	

Table **Ошибка! Текст указанного стиля в документе отсутствует.**-3: configuration of EES-x16 (SW3)

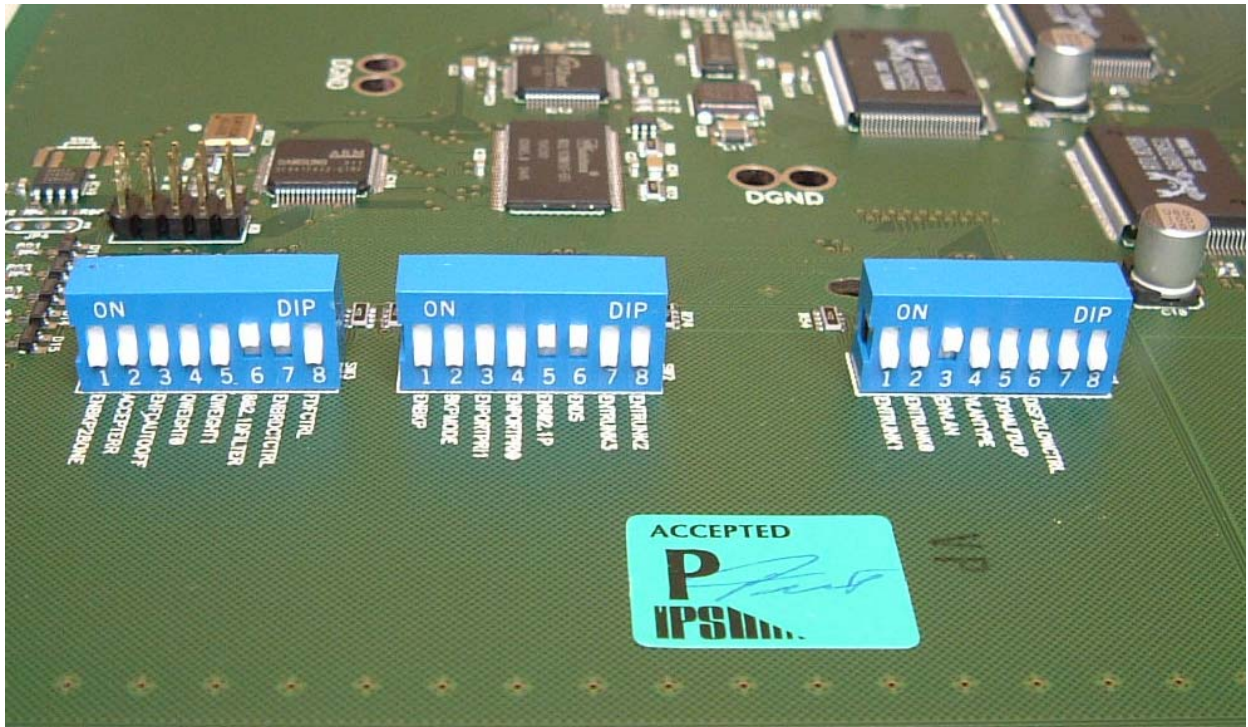


Figure 1: EES-x16 default DIP switch setting

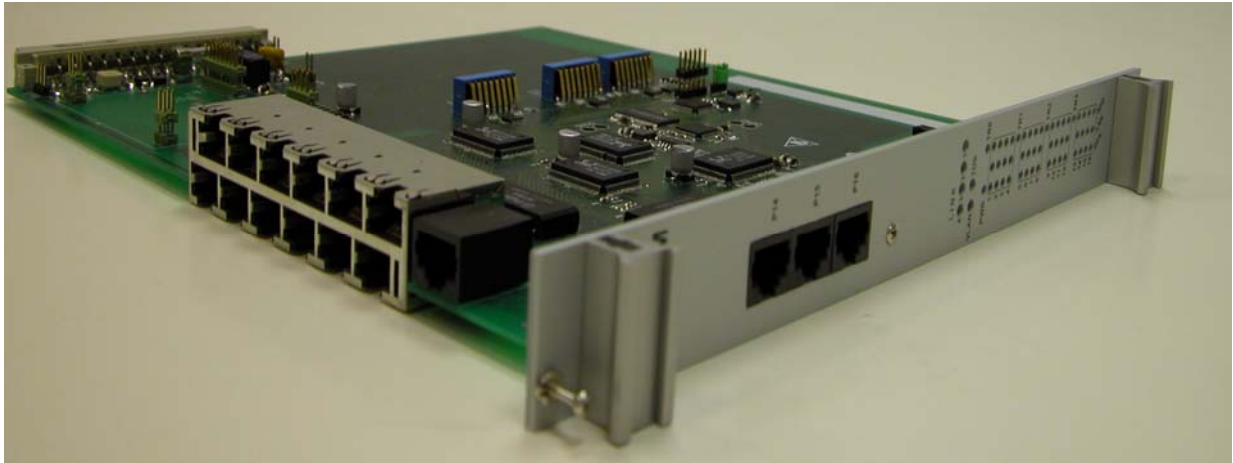


Figure 2: Photo of EES-x16 Ethernet switch with front panel and 13 downlink RJ-45 connectors

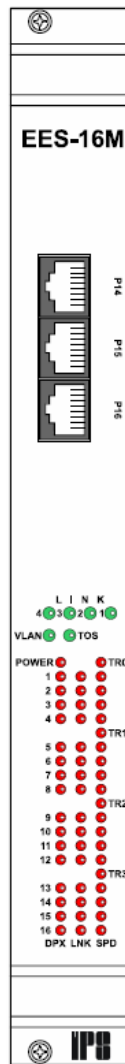


Figure 3: Front panel of EES-016 Ethernet switch unit with 3 RJ-45 uplink connectors

1.1.2. EES-x16 WITH GE OPTICAL UPLINK

EES-x16 may be equipped with GE uplink modules as follows :

- EES-M16 is EMX-x16 with multimode uplink module
- EES-S16 is EMX-x16 with singlemode uplink module

See Figure 4 for connecting scheme !

See Figure 6 for proper DIP switch settings!

1.1.2.1. EES-M16 characteristics

- Interface: DSC-RJ45
- Wavelength: 850 nm
- Launch power: -10 ~ -3 dB
- RX sensitivity: -15 dB
- Typical range: 0 ~ 0,5 Km
- Attenuation: 3 dB/Km
-

1.1.2.2. EES-S16 characteristics

- Interface: DSC-RJ45
- Wavelength: 1310 nm
- Launch power: -10 ~ -3 dB
- RX sensitivity: -23 dB
- Typical range: 0 ~ 25 Km
- Attenuation: 0,5 dB/Km

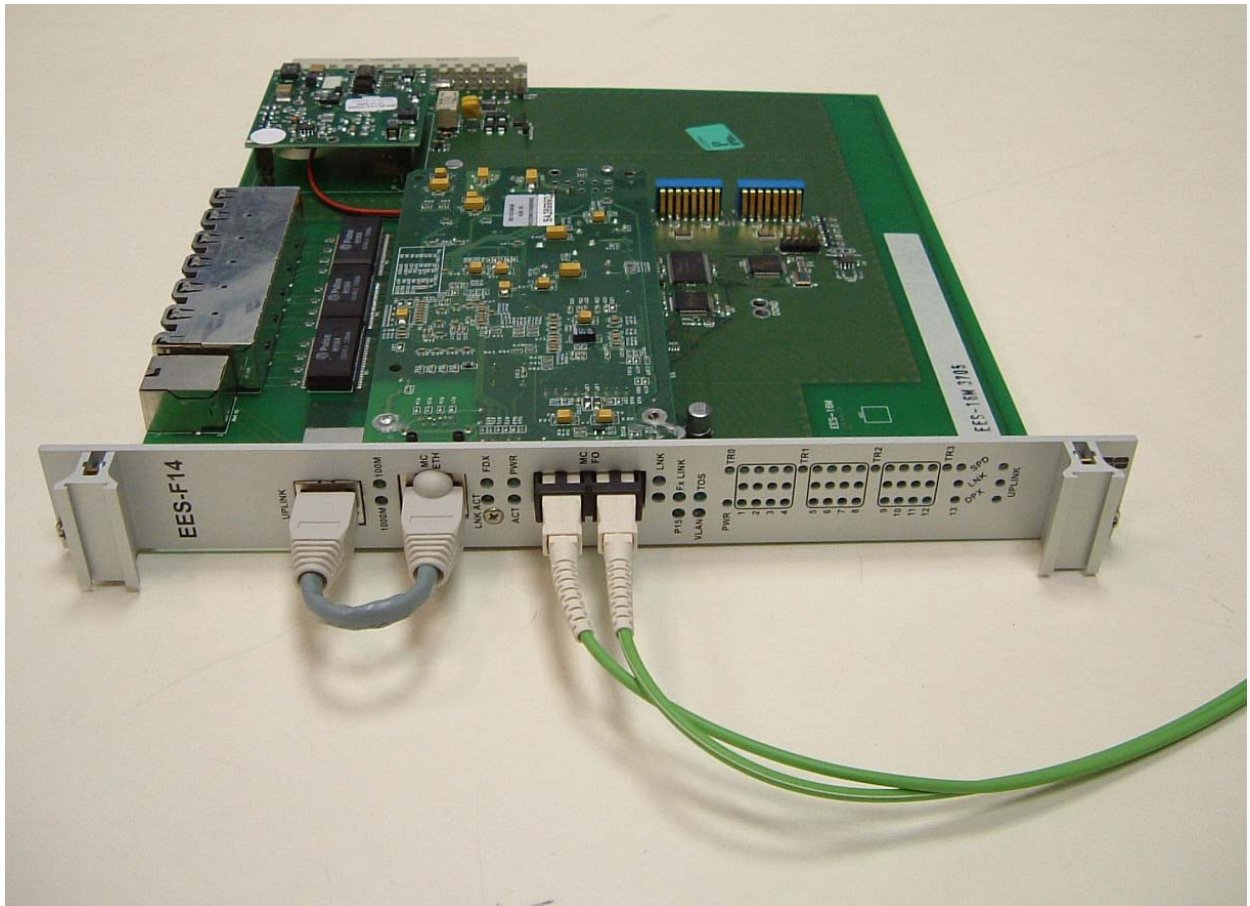


Figure 4: EES-x16 equipped with GE optical link module

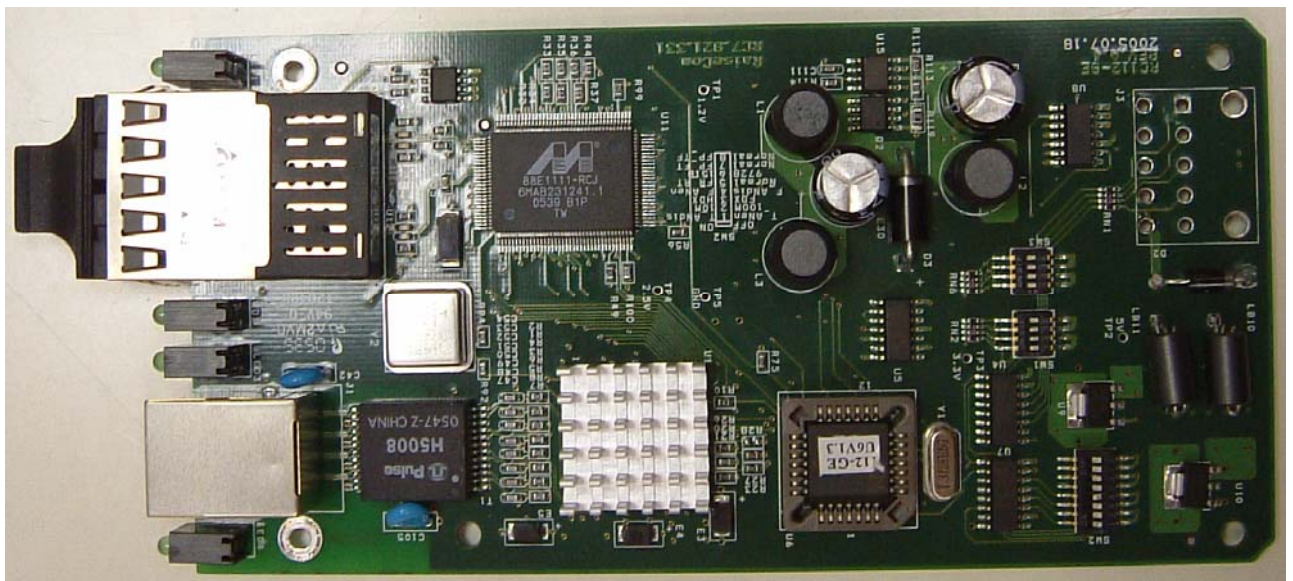


Figure 5 : Picture of GE uplink modul for EES-x16

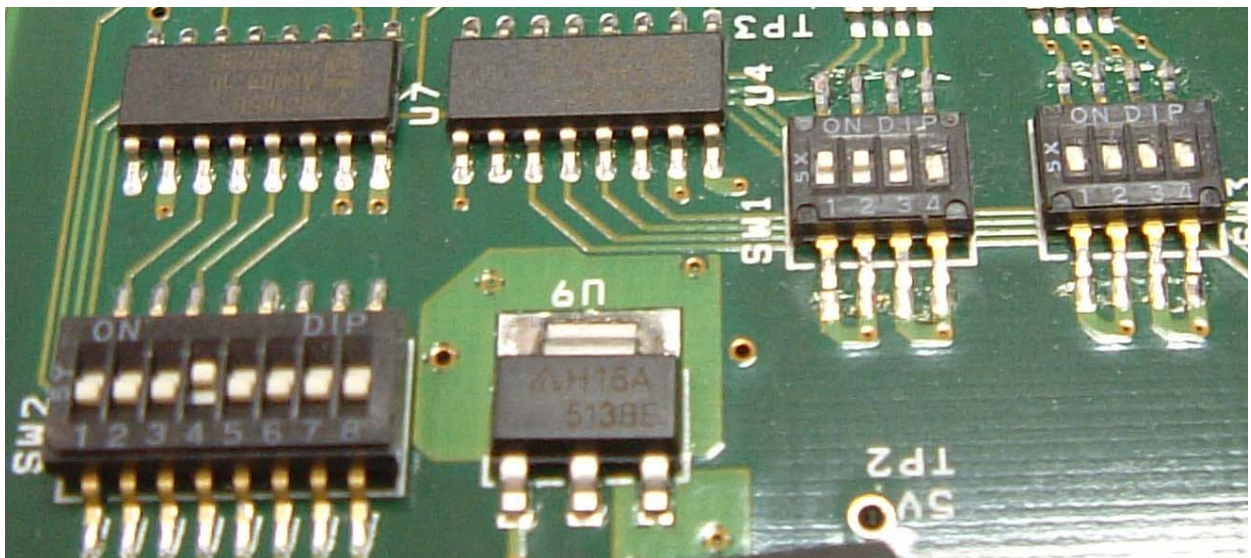


Figure 6: Default setting of DIP switches for GE uplink module for EES-x16