TTCMARCONI

SGNU

HYBRID ACCESS EQUIPMENT FOR CONTROL SYSTEMS (1U / 19" type)

The SGNU is an access device for narrowband voice, V / X, and Ethernet data services. It is intended for applications in IP networks, but it also allows transmissions in TDM networks based on the E1 structure. The main advantage is cost savings in the gradual migration from TDM technology to IP. In particular, terminal equipment has a longer lifetime compared to transmission technology and its upgrading (for transmission and control over IP) is progressive. SGNU enables a gradual migration from traditional serial services to modern IP networks without the need for immediate replacement of the transmission device.

SGNU is a device of the PCM30U-OCH family in a 1U / 19" design for standard rack mounting. Universality is achieved by means of interchangeable submodules, it enables construction for various contributor and line interfaces. For Ethernet services, it is able to work as a switch or bridge with VLAN support, for which it allows separate transmission in the TDM environment with guaranteed bandwidth (guarantee of transmission quality). It can form a forwarding point to SDH backbone networks or packet IP / MPLS.

SGNU is designed for voice and data services, it also enables use in the category of „Teleprotection" for the transmission of differential protections (C37.94).

The transmission reliability is further enhanced by the channel backup, i.e. the user data can be propagated by two independent paths (optical fiber / E1).

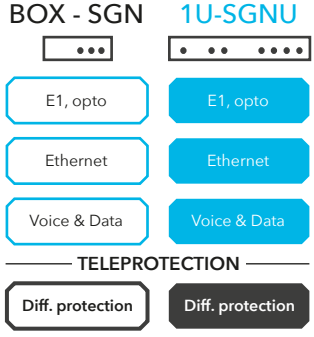
MAIN FEATURES

- Transmission width and delay guaranteed
- Hybrid solutions for both IP and TDM services
- The universality of serial service submodel combinations
- Backup transmission security

PROPERTIES

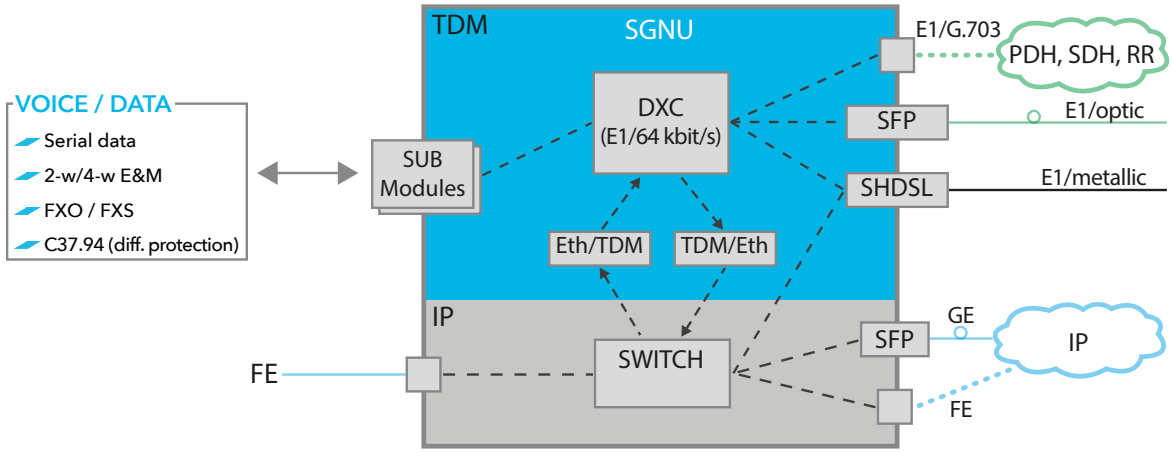
- Contributory interface voice, data, Ethernet
- Alarm signal 2x input / 2x output
- Ethernet interface FE or GBE / SFP
- Backup power supply 18-48 VDC / max. 15 W
- Extended temperature mode -25 ° C to +55 ° C
- Central or local supervision (Eth)
- Compatible with the PCM30U-OCH family

UNIVERSAL TELEPROTECTION AND TRANSMISSION SYSTEM



Next generation system integration and communication networks

APLICATION



- Built-in GBE / FE switch with VLAN support
- Built-in TDM crossconnect E1/64 kbit/ s
- Eth over TDM transmission conversion function
- TDM over Eth transmission conversion function
- SHDSL modem
- Optical transmission of SFP for E1 or GBE
- Max. 4 submodules for narrowband services

Wide range of applications, e.g. transport means in different networks, IP network access device transmission of serial services over IP network, etc.

TECHNICAL PARAMETERS

Number of ports

Type	Max. Number
Power	2
Ethernet FE/RJ45	4
Ethernet GE/SFP	2
E1/G.703/RJ45	2
E1/SFP/opto	2
SHDSL	1(E1) + 1(Eth)

Number of ports

Type	number per module	Max. Number
4-w/2-w with E&M	2	8
FXS	2	8
FXO	2	8
Data RS422 / RS232	2	8
Diff. protection	1	4

General

Power: 2x18-48 VDC / max. 15 W
Dimensions: (W x H x D) mm: 482.6 x 43.5 x 220
Environment: -25 °C to +55 °C
EMC: Emissivity: ČSN EN 55022, třída A Resistance: ČSN EN 61000-4-2, 4-3, 4-4, 4-5, 4-6, 4-8, 4-12, 4-18

Functional

Crossconnect: (8x8)x2 Mbit/s, level: 64 kBit/s, TS16 - CAS
Konvergence TDM over Ethernet: Protocol: CESoPSN or AAL1 Number of volumes: 15 Propustnost: 100 Mbit/s
Konvergence Ethernet over TDM: Protokol: HDLC Počet kanálů: 4 throughput: (1-30)x 64 kbit/s or 2x8x2 Mbit/s

User interface

4-w/2-w s E&M: Input: -17 dB to 4 dB, Output: -17 dB to 4 dB, ITU G.711 A, ITU G.712
FXS: Input: -4 dB to 4 dB, Output: -10 dB to 0 dB, ITU G.711 A, Q.552, Range: 1400 Ω / 1500 m
FXO: Input: -7 dB to 3 dB, Output: -8 dB to 1 dB , ITU G.711 A, Q.552
RS422 / RS232: TxD (103), RxD (104), TxC (114), Nx 64 kbit/s galvanically isolated signals
Differential protection transmission: optical interface 820 nm / ST connector, multivideo 50/125 nm or 62.5 / 125 nm, bridging attenuation 18 db (3 - 4 km) Speed Nx64 kbit / s, N = 1,2,4, -8 Protection: IEEE C 37.94 Standard, Siemens 7SD52x/53x, 7SD61, 7SD511, 512

Line interface

Electric E1: E1, G.703, G.704, G.706, code HDB3, impedance - 120 Ω sym
Optical SFP: By SFP Type: MM/SM, 850/1310/1550 nm, WDM range up to 160 km (one fibre 140 km)
SHDSL: 2 x 1-pair (1xE1 + 1xEth 5 Mbit / s), 16 / 32TC PAM, HDLC Channel width nx 64 kbit / s (for n = 3-32
Ethernet: Type - 2 x GBE/SFP + 4 x FE/RJ45 Switching - IEEE 802.1D / Q Switch Throughput-3 Gb/s VLAN ID range – 4096 Port mode – Tagged or untagged Frame Length-64B-1522B acc. to IEEE 802.3 ac

Contacts

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