

SDH04A

NG SDH STM4/1 Add-Drop Multiplexer

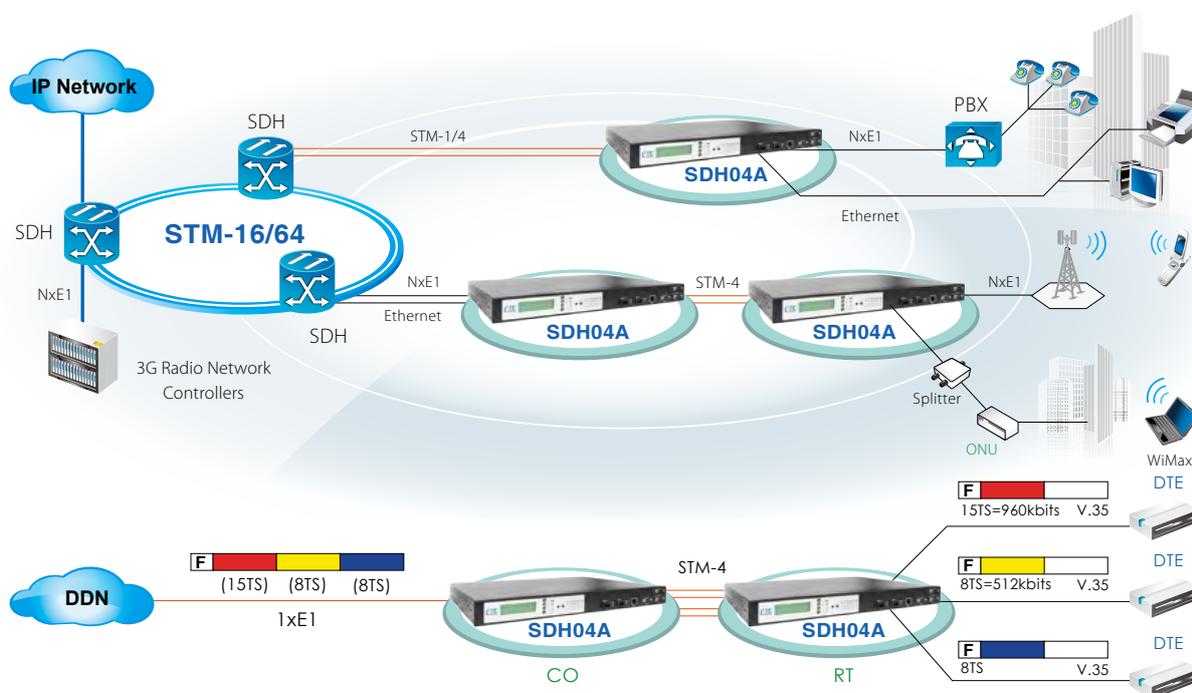


The SDH04A is a compact NG-SDH equipment which supports STM-1/4 ADM and offers various tributary interfaces like E1/T1, V.35, GbE, E3/T3...etc to provide any service in any slot. SDH04A is suitable for the applications of GSM/UMTS base station radio access networks (RAN) / MSAN and wireless backhaul. The SFP cage design in SDH04A offers the plug-and-play flexibility to change fiber modules for different bit rate and higher availability to use off-the-shelf fiber modules. SDH04A is a 1U standard form factor making it easy to fit in any 19" or 23" chassis and outdoor cabinet; Although SDH04A is a compact NG-SDH box, it also has similar flexibility of shelf-type SDH equipment, such as hot-swappable tributary cards / fiber modules / power modules and 1+1 load-sharing redundant power design. In order to supply reliable networks to carry more upcoming broadband services from wireless / HSDPA base stations to central office, CTC SDH04A provides carrier-grade Ethernet (E-Line) bundled with L2 functions to totally control QoS between end to end.

Features

- SDH04A provides multiple service solutions with standard STM-1/4 interfaces (SDH ADM/TM)
- Multiple hot-swappable tributary modules in any combination:
 - 4-channels E1 card (QE1R/B)
 - 8-channels E1/T1 card (8ET)
 - 8-channels E1 card (8E1R)
 - 4-ports Gigabit Ethernet switch card (QGbE)
 - 4-ports V.35 Data communication Interface card (QV35)
 - Single port E3/T3 interface card (ET3)
- 4 slots to support combinations of traffics in a 1U-height box
- Ethernet traffic is encapsulated and transported over SDH using Generic Framing Procedure (GFP) & Virtual Concatenation (VCAT)
- Hot swappable fiber optical module in SFP with optional 1+1 automatic protection switching (APS) for optical links.
- Automatic Laser Shutdown (ALS) based on ITU-T G.958/G.664.
- Data Communication Channel for remote control and online remote upgrade.
- Various network management interfaces: RS-232/ Ethernet/ LCD
- 1+1 Redundant AC/DC power modules with load sharing.
- Cross connect for TDM traffic (E1 & V.35)
- EMS tool for SDH04A series (GMS)
- DHCP Client/Telnet/Web for NMS port
- Keypad Lock/ Password for LCD security

Application



Specifications



V.35 Tributary Interface (QV35)

Data rate : 4CHx Nx64Kbps (N=1~32)
 Compliance : ITU-T V.35
 Clock Source : External, Internal and Recovery
 Control Signal : DSR, CTS, DCD, RL, LL ...
 Test Loops : Local/remote line/terminal/V.54 loopback
 Connector : DB44 connector (DB44 to M34 converter cable)



E3 /DS3 Tributary Interface (ET3)

Bit rate : 34.368 / 44.736 Mbps±20ppm
 Compliance : ITU-T G.703, G.823, G.824
 Impedance(connector) : 75Ω(BNC)
 Line code : HDB3 / B3ZS
 Software selectable E3/DS3 mode



E1 Tributary Interface (QE1B)

Bit rate : 4CHx2.048Mbps±50ppm
 Compliance : ITU-T G.703, G.704, G.706, G.732, G.823
 Impedance (connector) : 75Ω(BNC)
 Line code : HDB3 / AMI



8E1/ T1 Tributary Interface (8ET)

Bit rate :
 8CHx2.048Mbps±50ppm / 1.544Mbps±50ppm
 Impedance(connector) :
 120/100Ω software selective (wire-wrap)



AC Power Card

Input Voltage : AC90V ~ 260V
 Input Frequency : 47 ~ 63Hz
 Power : 27W Max

DC Power Card

Input Voltage : DC-36V ~ -72V
 Power : 27W Max



Gigabit Ethernet interface (QGbE)

Connector : 4xRJ45
 Compliance : 802.3z, 802.3x, 802.1p, 802.3u, 802.3, G.7041 GFP-F Up to 1Gbps throughput, 802.1Q VLAN support for the full 4096 VLAN ID Up to 8K MAC address, Port trunking, Traffic rate control, loopback test

Dimension & Weight	Power Consumption	Management Interface	Operation Requirement
(WxDxH) : 442 x 312 x 44mm 1U, 19" rack mount/ wall mount/ standalone Weight : 3.7kg	27W in full load	Protocol : VT-100 ANSI/ Telnet and SNMP (EMS) Craft interface : RS232 Async. (EIA561) Telnet//SNMP/httpd : 10/100 BaseT (RFC 1406) LCD : 2 X 16 LCD display with key control	Operating temperature : 0 ~ 55°C Humidity : 0% ~ 100% (100% at 30°C) MTBF : > 50000 hours EMI : CISPR 22 class A ESD : IEC-61000-4-2 level 2 Lightening and Surge : IEC-61000-4-5 class3

Ordering Information

Model Name	Type	Description
SDH04A-CH	Chassis	1U 19" 4-slot, STM4/1 ADM Rack without power module
SDH04A-AC	Power	30W AC power module for SDH04A rack
SDH04A-DC	Power	30W DC power module for SDH04A rack
SDH01-4E1B	Card	4 x E1 G.703 interface card BNC
SDH01-8E1B	Card	8 x E1 G.703 interface card 75 ohm RJ48 with 8 x 1ch RJ48 to BNC cables
SDH01-8E1R	Card	8 x E1 G.703 interface card 120 ohm RJ48
SDH01-8T1/E1W	Card	8 x T1/E1 G.703 interface card Wire-Wrap
SDH01-4V35	Card	4 x V35 interface card with 2 x 2ch M34 cables
SDH01-ET3	Card	E3/DS3 interface card
SDH04-QGbE	Card	4 ports Giga switch tributary card

Chassis Type
SDH04A - □□
 Example: SDH04A - CH

Power Type
SDH04A - □□
 Example: SDH04A - AH

Card Type
SDH04A - □□□□
 Example: SDH04A - QGbE

Specifications & design are subject to change without prior notice. Please visit CTC Union website for more details.