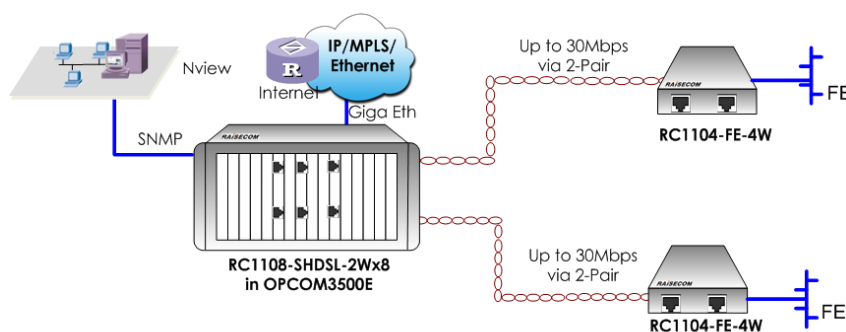


RC1104-FE-4W G.SHDSL.bis Modem

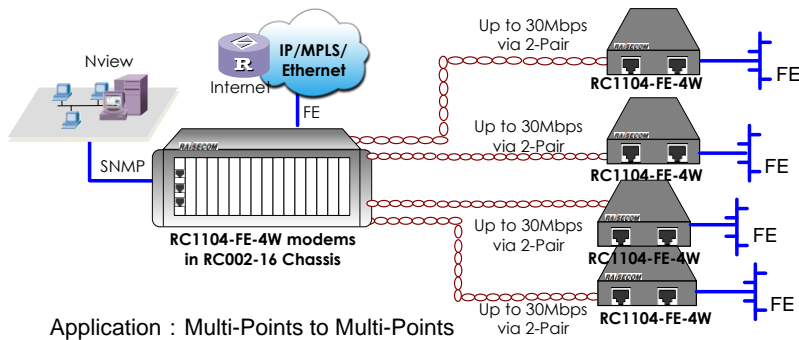
The RC1104-FE-4W is a G.SHDSL.bis modem which extends distances of fast Ethernet service with variable data rate from 64 kbps to 30 Mbps using TC-PAM (Trellis Code – Pulse Amplitude Modulation) technology. The modem using four-wire copper cable offers capabilities equivalent to normal HDSL modems on four pairs, offering 50 % saving in copper cost. G.SHDSL.bis technology extends transmissions farther than any other DSL technology, opening the door for service providers to deliver low cost and broadband access to a wider subscriber base. They fast and cost-effectively extend Ethernet distance up to several kilometers via one or two pairs of twisted copper cables, which is widely and commonly used in subscriber local loops. RC1104-FE-4W employs TC-PAM₁₂₈ compliant G.SHDSL.bis technology and EFM bonding to provide maximum 30Mbps symmetrical data over 2-pairs of twisted copper lines. The transmission distance can range up to 2.6km through 0.4mm copper cable on 2-wire under lab conditions. The RC1104-FE-4W modems are designed as rack-mountable modules, which can be inserted into RC001 single slot and RC002-16 sixteen-slot chassis. It will occupy one-slot width in the RC002-16 chassis which is a multi-service modem pool supporting many kinds of other Raisecom modular device with the SNMP management availability. The RC1104-FE-4W modems can also be deployed as CPE devices of the Raisecom RC1108 cards. By using Raisecom's NNM network management system, both local and remote management can be implemented. All user configurable parameters can be set and monitored through NNM system.



Typical Application



Application : RC1104-FE-4W to RC1108



Features

G.SHDSL Specification TC-PAM64(per pair-11.4 Mbps)supports,4 wires up to 22.8 Mbps;
 TC-PAM128(per pair-15 Mbps)supports,4 wires up to 30 Mbps;
 Supports EFM bonding.

Main Features

- Provides 10/100Mbps data connectivity on two unconditioned twisted copper pairs;
- Supports LED indicator on front panel for alarms indication;
- Operates at multiple data rates between 64 kbps to 15168 kbps on one pair cable and 128Kbps to 30336 Kbps on two pairs cable;
- Provides extensive diagnostics, including loopbacks, G.shdsl performance monitoring;
- Supports remote loopback and interface loopback;
- Supports internal and external loopback DIP-Switch of the G.shdsl interface from the front panel;
- Support fault pass through function from line to client and from remote client to local client;
- SNMP available for 19" Rack systems;
- Support transmission quality monitor in NMS: ES, SES, UAS from one to 96 15-minute one to seven and 24-hour;
- Supports Line-Probe function.

System Applications

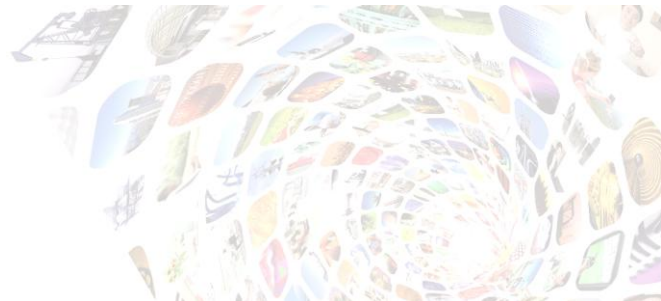
- line speed on one pair cable is $N \times 64\text{Kbps}$ (where $N= 1$ to 237);
- line speed on two pair cable is $N \times 128\text{Kbps}$ (where $N= 1$ to 237).

Line Interface/Type RJ45 connector, 4-wire unconditioned dedicated line (twisted pair)

Line Coding Trellis Coded Pulse Amplitude Modulation (TC-PAM)

Standard ITU-T G.991.2

Client interface/Type fast Ethernet 10/100Mbps, RJ45 connector



Specifications

| | |
|--------------------|---|
| Physical interface | 1*RJ45 G.SHDSL port; 1*RJ45 FE port; |
| LED | Interface status and system status can be displayed on front panel; |
| User Conditions | Operating temp: 0~50°C ; Storage temp: -40~70°C ; Humidity: 5~90% non-condensing; |
| Dimensions | 152(L) x 91(W) x 25(H) mm ³ |
| Power Consumption | ≤ 8W |

Ordering Information

| | |
|--------------|--|
| RC1104-FE-4W | Module, remote-managed G.SHDSL.bis modem, provides one 10/100M Fast Ethernet port and one RJ45 port for 4-wire G.SHDSL.bis line. |
|--------------|--|