**1CT3 Modules of H3C Series Routers**

**I.        Preface**

With the rapid development of network technologies and the quick pervasive of information technologies and network technologies, people make a higher requirement on network bandwidth. Network construction and transformation also get into peak. At the same time, the reduction of network operation cost and the introduction of competition mechanism cause a significant drop in network investment. The construction of new network and the transformation of original network also have one import characteristic, i.e. high performance and high bandwidth.

Formerly low-and medium-end routers are short of high speed WAN interface and provide only interfaces less than 2M. In the case of that the uplink bandwidth is larger than 2M; the only way is to bind many 2Ms. But this also brings a problem of high cost and without feasibility.

CE3/CT3, the tertiary group of PDH, is the digital WAN communication standard for transmitting high speed data flow. E3 is the Europe standard of tertiary group of PDH (34.368M) and T3 is the North American standard of tertiary group of (44.736M). As the key leased-line access method, E3/T3 interface has gained wide use abroad. China generally employs the Europe standard of E3.

Implementing CE3 interface on a router has visible advantages: (1) it provides higher density E1/T1 and N×64K access ports, significantly reducing the cost of every port. Additionally, the centralized management of many access ports can improve management efficiency and reduce management cost.  (2)  One card can support the high speed connection of single channel E3 and the low speed connection of E1/T1 and N×64K. This brings very flexible access approaches and services. Users can increase access rate agilely and gradually.

**II.    1CT3 Module**
**1.Introduction to Module**

CT3 module is the short of 1-port channelized T3 interface module.
The primary function of 1CT3 modules includes:
Under T3 operation mode, it performs the receiving/sending and handling of one T3 high speed data flow, and provides the access service of T3 data flow;
Under CE3 operation mode, it provides low speed access services of N×64kbps or 56kbps (N ≤128).
& Notes:
T3 represents the tertiary group of T serires in time division multiplex system, i.e. 44.736Mbps. One T3 can be channelixed 28 T1s by demultiplexing T23 (it represents the multiplex procedure from T2 to T3 and the demultiplex proceduer from T3 to T2. Here it refers to demultiplex procedure) and T12 (it represents the multiplex procedure from T1 to T2 and the demultiplex proceduer from T2 to T1. Here it refers to demultiplex procedure) twice. Every T1 supports T1/cT1 two operation modes.

**2.Module Appearance**

1CT3 module appearance is shown as follows:



Figure1          1CT3 module appearance

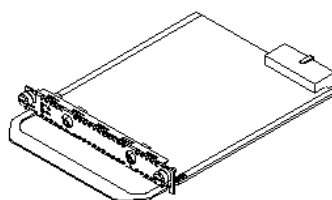Module interface indicator
1CT3 module panel is shown as follows:



Figure2          1CT3 module panel

The following table shows the implication of indicators:
Table 2    1CT3 module indicator implication

| | |
|---|---|
| LINK | Extinguished: represents the link is not connected.<br>Lighting: represents the link is connected. |
| ACT | Flashing: represents that some data have been received/sent.<br>Extinguished: represents that no data has been received/sent. |

### 3.Module Interface Attribute

Table 3    1CT3 module interface attribute

| Attributes | Description |
|---|---|
| Type of connect or | SMB |
| Connector number | 2 |
| Interface standard | G.703，G.704，G.752， |
| Interface rate | 44.736Mbps |
| Type of cable | T3 cable (75Ω coaxial cable) |
| Operation mode | T3<br>CT3 |
| Service | T3 leased-line |

### 4.Module Interface Cable

The cable and its connection of 1CT3 module is similar to that of 1CE3 module.

& Note:

E3/T3 cable is optional. It is necessary for users to preselect when purchasing 1CE3 module, or it is unavailable.