

## **Application Prospects**

With the commercial transition of the cable television network, this industry is positively changing from previous' single basic service situation (only rely on radio and television) to the development of the integrated service provider. Actively promoted the DTV, FTTx (FTTB, FTTP, FTTH), Triple-play and two-way network transformation. Carrying out all kind business, such as IPTV (IP / QAM), NVOD, VOD and time-shifted TV interactive etc. All these are shows that, this industry are being effort to actively develop a variety of value-added services. As the amount of cable TV transmission network information suddenly increases. And in order to provide more Interactive services capacity, the next generation of radio and television network (NGB) appeared.

The new generation of optical communications technology whose core is DWDM technology, should be the direction of NGB. DWDM technology can provide large-capacity of backbone network and metropolitan area networks to NGB. The PON (Passive Optical Network) should be the mainstream technology of NGB user access network.

DWDM technology can take full advantage of existing fiber resources, huge capacity, transparent transmission and all-optical switching; make the whole network with a high standard of flexibility, economy and reliability.

DWDM technology is mainly composed of narrow-band light source (optical transmitter), DWDM, EDFA, OADM, OXC, Receiver and other components that all met the ITU standard wavelength.

The optical transmitter 1550nm with high-performance of tunable and manageable wavelength is required in DWDM system; in order to running all kinds function such as wavelength conversion, wavelength management, wavelength routing, optical add-drop multiplexing etc.

The optical transmitter HT8827 with the full C-Band tunable, and covering all available wavelengths of the C-Band. It can fast and accurate tuning to the desired wavelength according to the needs of the network at any time. The

High wavelength accuracy, high wavelength stability, and fast tuning speed, are entirely appropriate NGB DWDM system.

With its high wavelength flexibility, replaceability and excellent cost performance, this device will be the direction of development of CATV 1550nm externally modulated optical transmitter. It will gradually replace the traditional fixed wavelength of 1550nm external modulation optical transmitter, become a mainstream product. No doubt this device will be the best choice for CATV system integrators and operators.