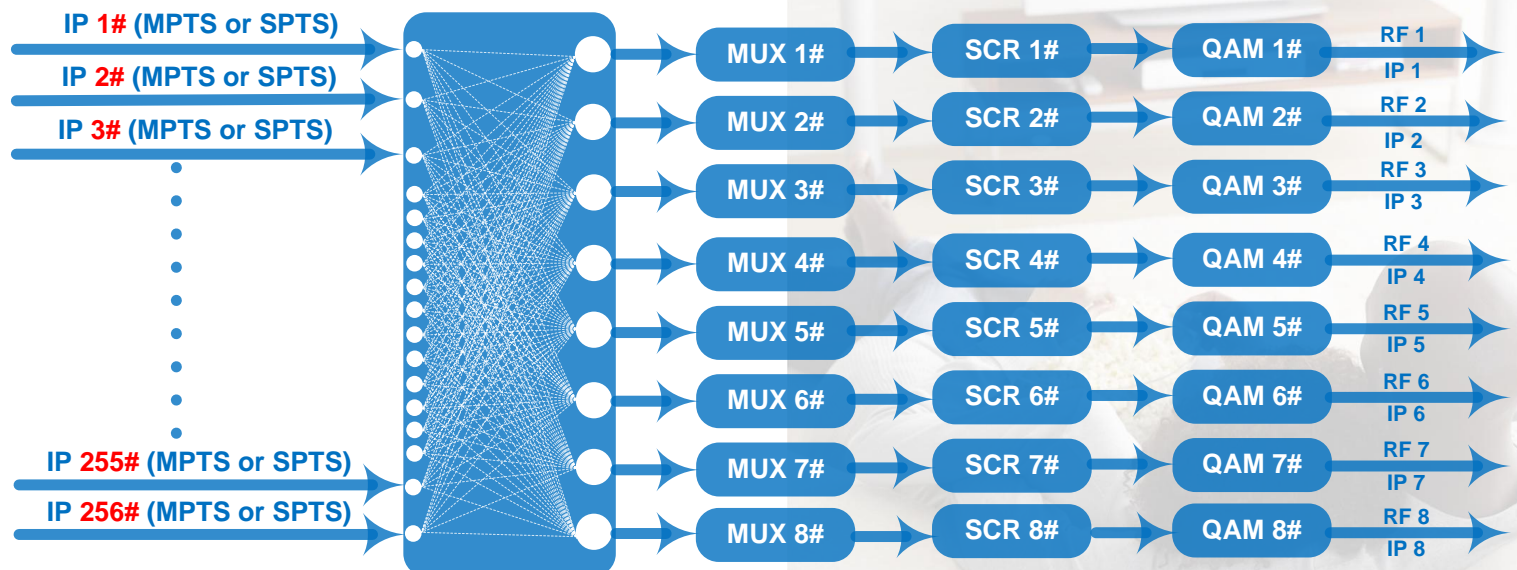# DX328

MUX SCR QAM Card

- **Support 256 IP Input (MPTS or SPTS)**
- **Maximmun 840 Mbps Input**
- **Support PSI/SI editing and inserting**
- **8 MUX,8 SCR, 8 QAM enbeded**
- **Support 4 simulscrypt CA**
- **Support accurate PCR adjusting**
- **8 Frquency output with excellent MER≥40dB**
- **Support 16/32/64/128/256 QAM**

DX328 8 IP Mux-Scrambling and QAM modulation module is the latest generational mux-scrambling-modulating all-in-one device. Support maximmun 256 IP (MPTS/SPTS) input, after 8 multiplexer and 8 scrambler process, it gives 8 RF output (4 adjacent frequency per each RF output interface) as well as 8 IP output at the same time. RF output for local transmission and IP output for remote sub-headend. It adopts the slot structure, one device support maximmun 3 DX328 card insert and 256 channels mux-scrambling-modulation. With its powerful performance and low cost, DX328 is especially adequate for the new generation CATV system

Inner Principle

IP 1# (MPTS or SPTS)
IP 2# (MPTS or SPTS)
IP 3# (MPTS or SPTS)
IP 255# (MPTS or SPTS)
IP 256# (MPTS or SPTS)

MUX 1#	SCR 1#	QAM 1#	RF 1 / IP 1
MUX 2#	SCR 2#	QAM 2#	RF 2 / IP 2
MUX 3#	SCR 3#	QAM 3#	RF 3 / IP 3
MUX 4#	SCR 4#	QAM 4#	RF 4 / IP 4
MUX 5#	SCR 5#	QAM 5#	RF 5 / IP 5
MUX 6#	SCR 6#	QAM 6#	RF 6 / IP 6
MUX 7#	SCR 7#	QAM 7#	RF 7 / IP 7
MUX 8#	SCR 8#	QAM 8#	RF 8 / IP 8

Why Choose DX328

Hot-plugging Support

DX328 card is directly connected with the power supply through the interface; even if being powered-on, any one of those three daughter cards can be hot plugged in and out; other cards can still work normally without any interference.

Directly Connect with the power plug

Independent multiplexing control unit

Different from the former multiplexing backcard principle, each DX328 card has its own independent multiplexing and control unit; Unlike the other manufacturer 's similar products which will completely die when its backbone multiplexing board fails, the DX328's 3 slave cards are completely independent of each other. If anyone of those 3 cards is failed, the other two cards could work as normal due to its own multiplexing scrambling and QAM control unit. Hence, the reliability of the equipment has been greatly improved.
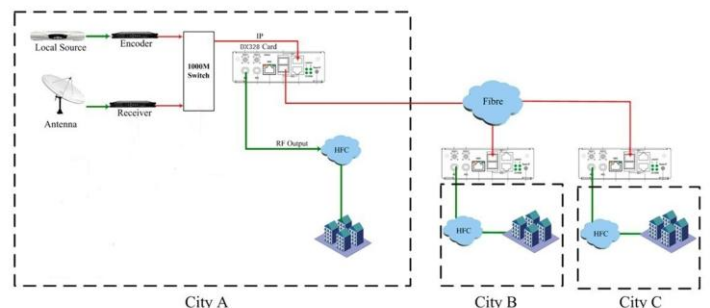
GE and NMS Port for each module

With GE port per one card and MPTS/ SPTS data input support , it can make sure fully use the capability of DX328 card. Also separate NMS port design make the management more stable.
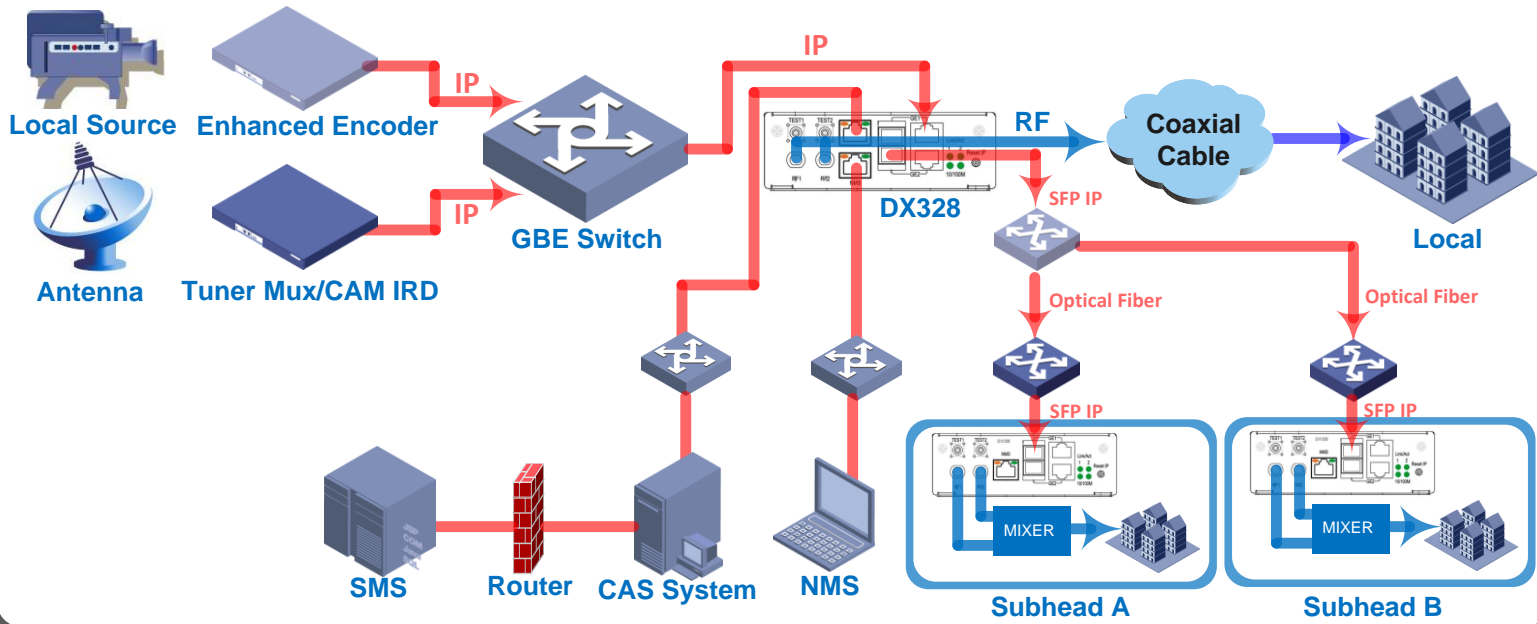
High functional integration

The multiplexing, scrambling, modulating and IP output can be supported by one card. 24 frequency output in total by three cards.

Card Type Changeable

Also support other cards: DX324, DX314, DX308 module

Support the RF and IP Output

DX328 not only can be used as one IP mux-scrambling QAM module, but also can be utilized to realize other purposes by its IP output function. The IP data output is the loop output after multiplexing and scrambling. The IP output data could be use to transmit data to remote location

DX328

MUX SCR QAM Card

System Connection Sample IP Base

Specification

Input

Interface	1GE(RJ45) or 1 SFP input port，hot backup
Transport Protocol	TS over UDP，unicast and multicast, IGMP V2/V3
Transmission Code	Max 840Mbps for all channels

Multiplexer

Input Channel	256
Output Channel	8
Max PIDs	256 per channel
Functions	PID remapping(auto/manually optional) PCR accurate adjusting PSI／SI table automatically generating

Scrambling

Max simu-encrypt CA	4
Scramble Standard	ETSI 101 197,ETSI 103 197
Connection	Local/remote connection

QAM Modulation

QAM Channel	8
Modulation Standard	EN300 429/ITU-T J.83A/B/C
Symbol Rate	5.0~7.0Msps，1ksps stepping
Constellation	16、32、64、128、256QAM
FEC	RS(204, 188)

RF Output

Interface	2 F typed output port for 8 carriers, 75Ω impedance
RF Range	48~860MHz，1kHz stepping
Output Level	-16dBm~6dBm(output IP from one F type)，0.5dB stepping
MER	≥ 40dB
ACLR	-60 dBc

System

Network management software (NMS) supporting

General

Demission (WxLxH)	482mm×455mm×44.5mm
Weight	6.1kg
Temperature	0~45℃(operation)，-20~80℃(storage)
Power Supply	AC 100V±10%，50/60Hz or AC 220V±10%，50/60Hz
Consumption	15.4W

DX328 card video guide on line

Password : 12345

MUX SCR QAM Card

Technical Compare

Main Feature	Dexin DX328	Gospell GQ-3670
Input GE & SFP Port	3	1
Maximmun Input TS	256x3=768 TS	250
Maximmun Input Data	800Mx3=2400 Mbps	800Mbps
Multiplexer Module	24	16
Scrambler Module	24	16
Separate SCR and NMS Port	Yes	No
Simul-crypt CAS	4	4
Support PSI/SI editor	Yes	Yes
Support PID filtering & pass-through	Yes	Yes
Maximmun Outupt Frequency	24	16
Slot Structure	Yes	No
Hot-plugging Support	Yes	No
RF Output	Yes	Yes
GE IP and SFP Outupt	GE Port x3 and SFP Port x3	No
Cards Type Changeable	Yes	No
Independent Multiplexing Control Unit	Yes	No
Dual Power Supply Optional	Yes	No