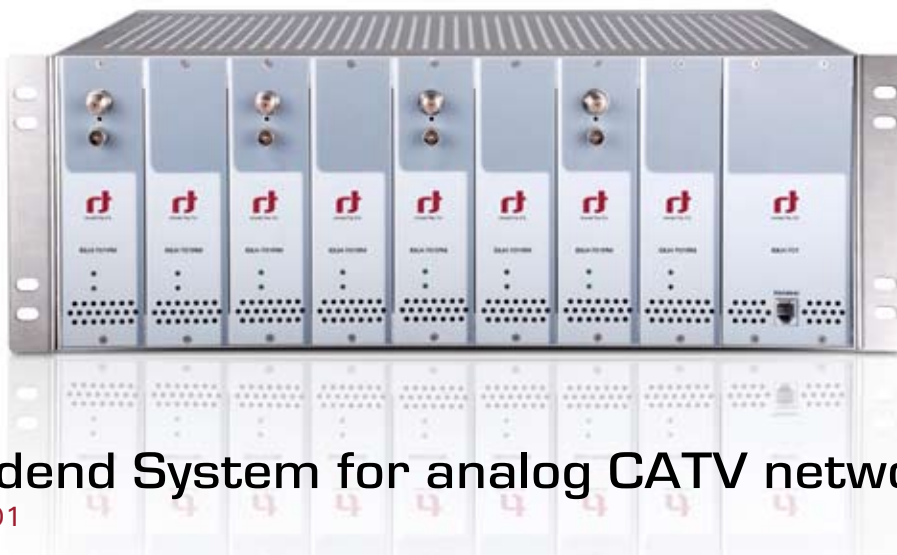




Headend System for analog CATV networks

IDLH-701

IDLH-701 Modulator Bank offers a compact CATV Headend with a 19" chassis and 8 slots for analog or digital plug-in modules. It supports the conversion of QPSK/QAM/COFDM signal to the traditional RF carrier such as PAL, NTSC or SECAM. The tuner-saved TS modules share descrambled streams from the master module, which supports Common Interface and could descramble several streams at the same time (Multi-decryption function should be supported by CAM). Migration from analog CATV system to digital could be achieved with different modules in one chassis.

Analogue
Headend

Main Features

- Supports Common Interface and multi-decryption CI CAMs
- Combined DVB receiver and Analog TV modulator on each slot
- Worldwide Analog TV standards, including A2 and NICAM
- Tuner-saved design by TS sharing among slots
- Easy configuration through External control unit
- 48MHz to 860MHz full band adjacent agile alignment
- RF output level: 110dB μ V/ch
- Spurious less than -60dBc (110dB μ V/ch@25 μ)
- Main Frame supports all future modules, rack mount or wall mount
- High price and performance ratio and easy maintenance

Module Cards

- IDLH-701MF Chassis including PSU, Combiner and Amplifier
IDLH-701CU Control unit
IDLH-701PM DVB Receiver and RF Modulator
IDLH-701RM DVB Receiver and RF Modulator

Standards available upon request (* Coming soon)

- *IDLH-701QAM AM Modulator
*IDLH-701CM COFDM Modulator

Video Input	Single Channel			
	DVB-S	DVB-T	DVB-C	Digital TS
PAL D/K	IDLH-701PM-03S	IDLH-701PM-03T	IDLH-701PM-03C	IDLH-701RM-03D
PAL B/G	IDLH-701PM-13S	IDLH-701PM-13T	IDLH-701PM-13C	IDLH-701RM-13D

Technical Specifications

IDLH-701MF:

Interface

Slot for modules	8
RF Output port interface	75Ω, F-female
Test Port(-20dB) interface	75Ω, F-female
RF Output Return Loss	≥12dB (VHF) ≥10dB (UHF)
Output Level	100dBμV/ch
Output Level accuracy	± 3dB (47 to 862MHz; 0 to 45℃)
Harmonics and Spurious	60dBc typ.; 56dBc min.

Miscellaneous

Power supply	90~250ACV, 50/60Hz
Power consumption	200Watts Max.
Main Frame Dimensions	434mm*340.5mm*160.5mm
Operation Temperature	0~45℃
Recommended Operation Humidity	20~80% Non-condensed
Storage Temperature	-20~80℃

IDLH-701PM-S:

Tuner

RF input	75Ω, F type
RF output	75Ω, F type
Input Frequency Range	950~2150MHz
Input Level	-25~-65dBm
Symbol Rate	2~45Mb/s
Rolling Off Factor	0.20 or 0.35
Punctured Rated	1/2, 2/3, 3/4, 5/6, 6/7, 7/8
Reeds Salomon Decoding	204, 188 T=8 & I=12
LNB Power	13V, 18V Switchable
LNB Switch	0, 22KHz and DiSEqC 1.0

CI

CI PCMCIA Module Slot One PCMCIA type
Fully support Irdeto, Viaccess, NDS and other Common Interface system

IDLH-701PM-C:

Tuner

RF input	75Ω, F type
RF output	75Ω, IEC type
input frequency	40~860MHz
input level	40~85dBμV @ 64QAM
QAM Mode	16, 32, 64, 128, 256QAM
symbol rate	2.5~6.952MSym/s

CI

CI PCMCIA Module Slot One PCMCIA type
Fully support Irdeto, Viaccess, NDS and other Common Interface system

IDLH-701PM-T:

Tuner

RF input	75Ω, F type
RF output	75Ω, F type
Input Frequency Range	174~230MHz, 470~860MHz
Input Level	-25~-65dBm
Symbol Rate	3.6~6.952Mb/s
Used Bandwidth	7MHz (174~230MHz), 8MHz (470~860MHz)
Punctured Rated	1/2, 2/3, 3/4, 5/6, 7/8
Reeds Salomon Decoding	204, 188 T=8 & I=12
Guard interval	1/4, 1/8, 1/16, 1/32
FFT Mode	2k, 8k

Technical Specifications

CI

CI PCMCIA Module Slot One PCMCIA type

Fully support Irdeto, Viaccess, NDS and other Common Interface system

IDLH-701PM/RM series:

RF

Video Carrier Frequency Range 48.25~860.25MHz(Adjustable, step by 1MHz)

Power Level Attenuation 0~18dB (Adjustable, step by 1dB)

Picture Carrier Accuracy $\leq \pm 5\text{KHz}$ (VHF); $\leq \pm 10\text{KHz}$ (UHF)

Audio Carrier Frequency (main) 6.5MHz (D/K,L)

6.0MHz

5.5MHz

4.5MHz

Audio Carrier Frequency Accuracy $\pm 2\text{KHz}$

Video/Audio Carrier Ratio (main) 12dB/16dB selectable

Audio Carrier Frequency (second) 6.742MHz (D/K)

6.258MHz

5.742MHz

4.724MHz

Video/Audio Carrier Ratio (second) 20dB

Video Modulation index 77.5~97.5%, step by 1% (D/K,B/G,I,M/N)

Audio Modulation deviation peak-peak 40~160KHz, step by 10KHz (B/G,D/K,I)

20~80KHz, step by 5KHz (M/N)

Video

K2T $\leq 4\%$

Video S/N Ratio $\geq 45\text{dB}$ (8ch combined)

Frequency Response $\leq \pm 1\text{ dB}$

Differential Gain $\leq 4\%$

Differential Phase $\leq 4^\circ$

C/L Delay $\leq 45\text{ns}$

Audio

Pre-emphasis time constant 50 μS (B/G,D/K,I)

75 μS (M/N)

Total Harmonic Distortion $\leq 1\%$

Frequency Response $\leq \pm 1.5\text{dB}$ (40Hz~15KHz)



