

CatCast

Ku band (MVDS) Digital Transmitter Indoor/Outdoor



Catcast Technology Co., Ltd.(Chengdu)

Overview

HP-85XXA/B **Ku band (MVDS) digital transmitter** is a kind of wireless digital TV signal transmission device newly developed by Catcast. It works on Ku band (10.7GHz -12.0GHz), and output power is from 200mW to 50W.

Comparing to the standard BUC, the power supply and monitoring alarm unit (indoor type) are designed inside big cabinet. The indoor type with LCD control panel can monitor key values at real time, outdoor type with optional SMS module monitors key values. The series transmitter can be widely used in wireless point to point signal transmission system and omni-directional transmission system. It applies to multiple digital modulation modes DVB-S/S2 and can be used for multi-channel digital TV signal coverage over a range of 30km. It is also widely used as a satellite uplink power amplifier (frequency can be specified by user). Today, this kind of Ku band (MVDS) transmitter offers the best technical proposal which can replace MMDS signal coverage.

Main features

- Operation frequency: 10700-12000MHz, indoor type and outdoor type for optional.
- Optional Output Power: 200mW/2W/4W/8W/10W/12W/15W/24W/30W/40W/50W.
- The Ku series transmitter is specifically researched, designed and produced according to the demands of customers.
- Comparing to standard BUC, with big cabinet installed all components to realize high power.
- With *power supply unit* and *monitoring unit* (optional for outdoor type) designed in transmitter.
- With *cooling fans* designed for transmitters for better dissipating heat.
- Indoor type with touchable LCD control panel to adjust the key parameters: Output power range, Input level range, AGC range and monitor the abnormal values real-time.
- Outdoor type is designed with waterproof structure, its convenient modular design can arrange on antenna directly to reduce the loss of feeder.
- With a wide frequency band, large program capacity and strong ability of anti-interference.
- Low cost in receiver: TV signal can be easily received with any Ku Receiving antenna existing in market installed.
- With simple process in installment and debugging, convenience in maintenance.
- With RFU modularization, broadband and high consistency design, super-linear and all-solid-state power amplifier.
- Automatic Level Control in larger dynamic range(ALC); Automatic Gain Control (AGC); adaptation of wide dynamic range in different environments.
- With over-VSWR, over-voltage, over-current, over-heat and lighting auto-protective functions.
- With extended interface for remote control and GSM message auto-alarm system (optional), concentrated monitoring can be achieved.

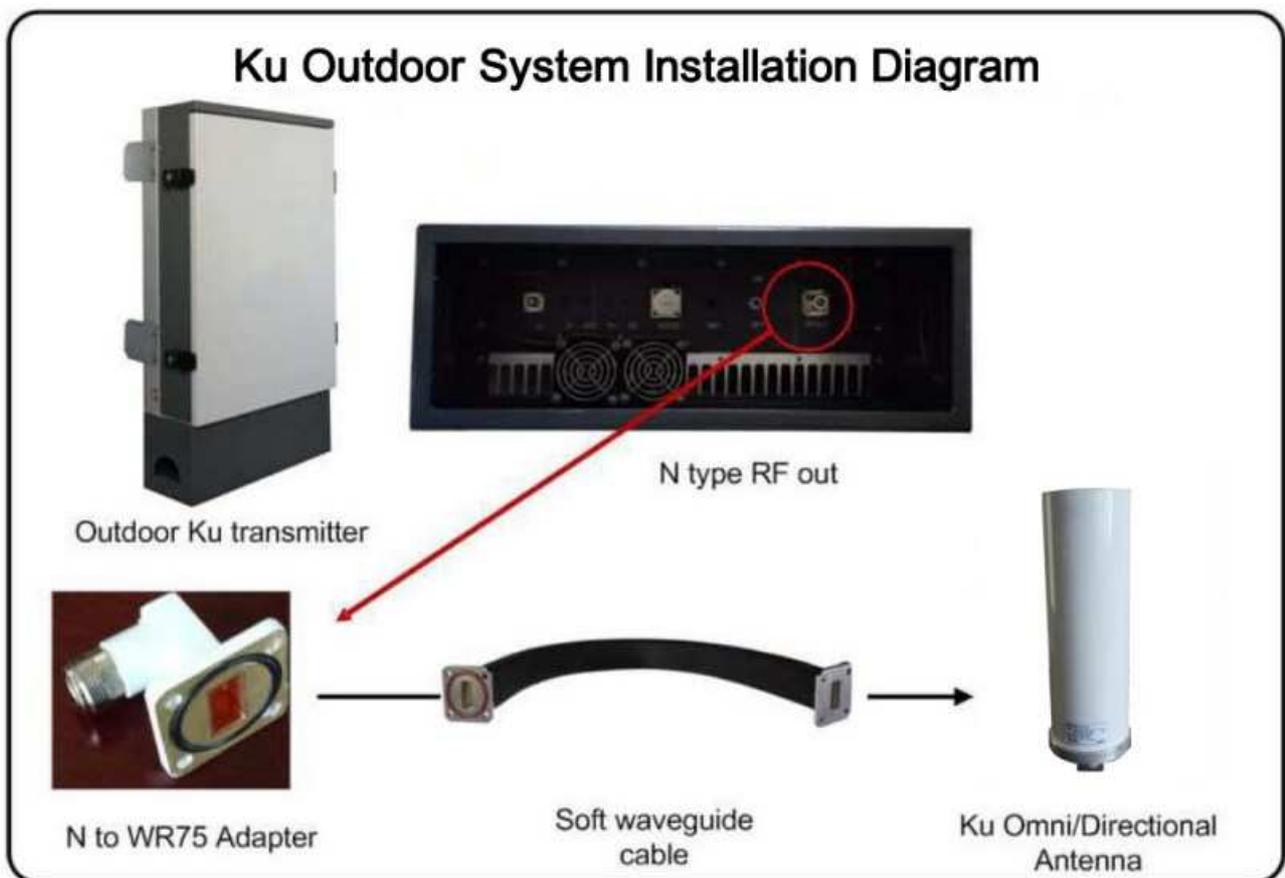
- With the international and the domestic advanced level of the design and production of equipment.
- Combined Ku band (MVDS) series transmitter with MMDS transmitters of Catcast, we can build seamless coverage system with higher cost performance.

Technical Specifications

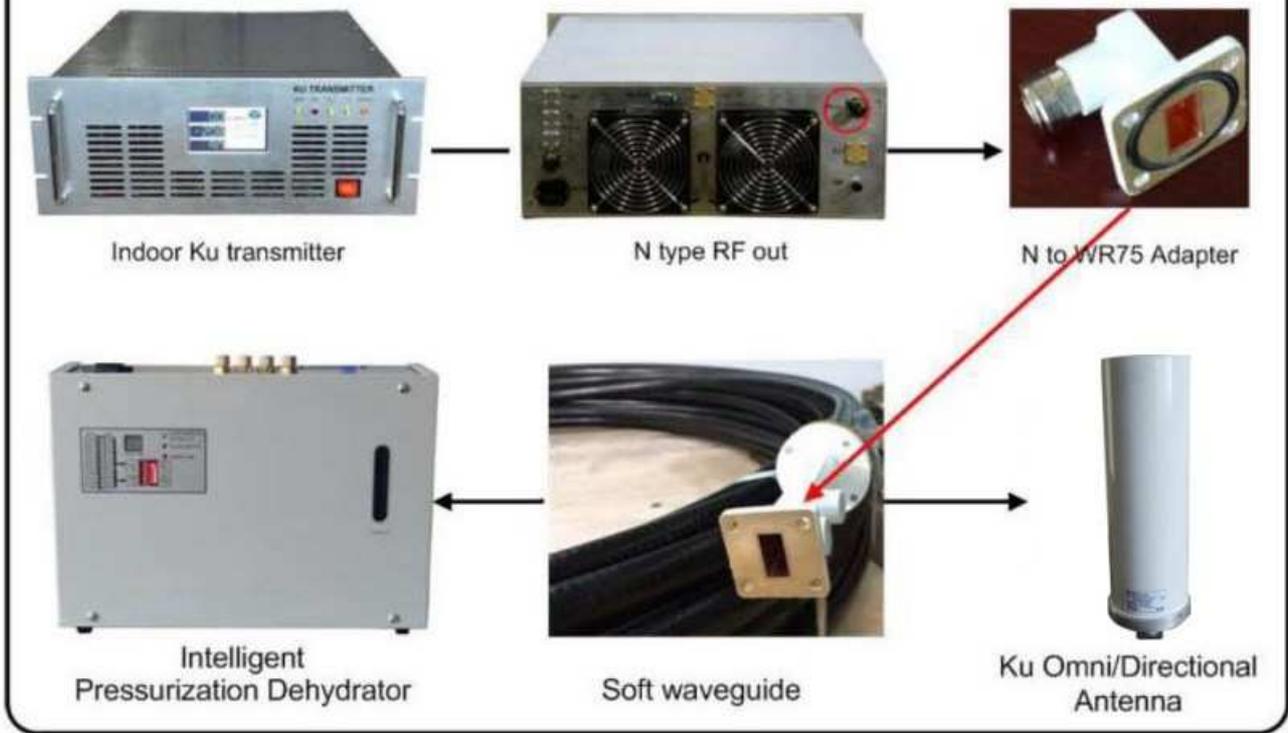
Model	HP-8402	HP-8420	HP-8440	HP-8480 A/B	HP-8510 A/B	HP-8512 A/B	HP-8515 A/B	HP-8524 A/B	HP-8530 A/B	HP-8540 A/B	HP-8550 A/B
Power Level	200mW	2W	4W	8W	10W	12W	15W	24W	30W	40W	50W
RF Output Frequency Range	10.7~12.0GHz(frequency band carrier signal takes could be set arbitrarily, or specified by user)										
Bandwidth	Maximum Bandwidth≤300MHz										
Modulation Mode	DVB-S/S2,QPSK/8PSK										
Power Levels	200mW/2W/4W/ 8W/10W/12W/15W/24W/30W/40W/50W optional										
RF Output Interface	N50K or BJ120 waveguide connector Return Loss: 20dB										
RF Frequency Response	BW: 300MHz(Or specified by user) Pass band Fluctuation: ≤2.0dB Any Within 10MHz:≤1.0dB										
Group Delay Characteristics	≤40nsec										
IF Input Level	-25~-10dBm										
IF Signal Input Frequency	950~2150MHz(or customized)										
IF Input Interface	75Ω/F connector Return Loss: 15dB										
In-band Spur Restraint	-60dBc(relative digital signal level)										
Automatic Level Control	≥20dB										
Gain Control Error	Gain Control: 0~20dB,error≤±0.5dB										
	Gain Control: 20~31dB,error≤±0.75dB										
Gain Control Range	0~31dB, 1.0dB stepping										
Environmental Conditions	Working Temperature Range: -20℃~+45℃ Humidity: no condensation Relative Humidity: 0~95% no saturation										
Working Voltage	AC 220V±10%,50/60Hz										

Package size and package weight											
Power Level	200m W	2W	4W	8W	10W	12W	15W	24W	30W	40W	50W
Indoor Type	/	/	56*47*22cm/20Kg						77*57*40cm/ 33Kg		
Outdoor Type	20*15*10cm/ 0.3Kg		40*25*15 cm/3Kg		61*43*41cm/30Kg				88*54*42cm/ 45Kg		
Remote Control	Remote administration and SMS alarm function(optional)										

Ku Transmission System Installation Diagram:



Ku Indoor System Installation Diagram



Typical application:

