



DTV Signal Generator (MPEG2/DVB/ATSC/Opencable Signal Generator) - DSG300

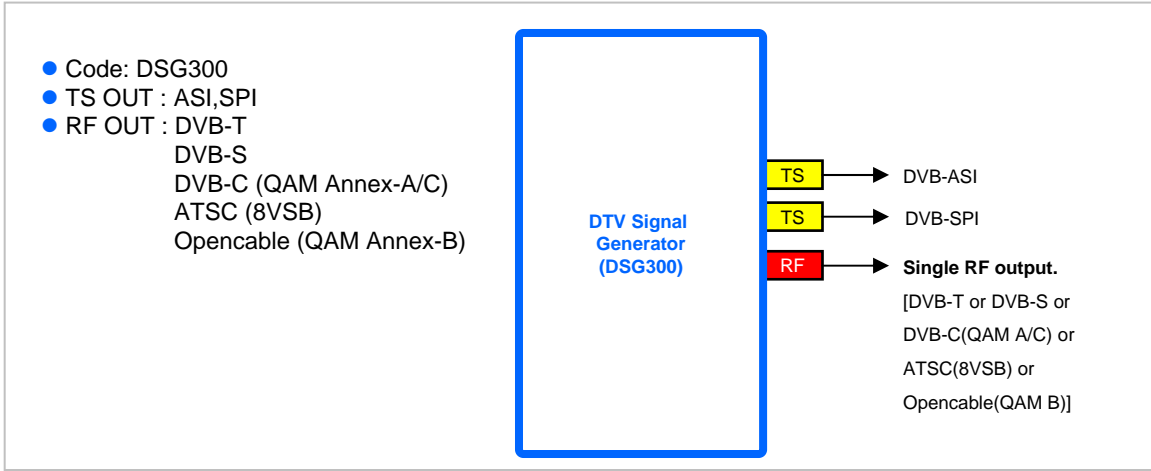
Overview

DSG300 is the all-in-one DTV signal generator supporting TS and RF Signal output in one unit. It can cover all DTV standard in one unit including DVB-T, DVB-C, DVB-S, ATSC and Opencable. DSG300 offers easy connection to various digital television signal sources and receivers, suitable for high-definition and standard definition digital television.

If you want DTV signal generator with multi standard in one unit, DSG300 is the most cost-effective solution which supports Multi-DTV standard and reasonable RF performance for below applications.

Intended Application

- Set-top Box / DTV(LCD, PDP) Manufacturing
- Set-top Box, DTV Development and Performance Verification
- Stream Play-out and Recording for Production Line Applications
- Simulation of Mobile DVB-T and DTV (Terrestrial/Satellite/Cable) Broadcasting Transmission
- DTV Chip Development (Tuner/MPEG)
- DTV Demonstration & Sales
- DTV Signal Source in exhibition



www.dtvinteractive.co.kr
DTV Test & Measurement Solutions



Main Features

● DSG300

- RF Output : Multi DTV Modulator
 - DVB-T, DVB-C(QAM A/C), DVB-S, Opencable (QAM B) or ATSC (Supports only Single RF among those standards)
 - * If you want multi-standard and multi-RF, Please refer to DSG500 series.
- RF Output Level : -10 ~ -70dBm
- Frequency Range: 50 ~ 862 MHz
- Output level step size : 1dB
- MPEG2 TS Output : DVB ASI/LVDS Multi Interface
- Memory Play on RAM Cache memory
- Automatic Bit-rate and Play Time Calculation
- User-defined Output Bit-rate Setting (Burst mode/ Static mode)
- Packet Size : RAW/188/204/188+16(LVDS)
- TS Verifying Setting
- Inserting Null Packets (Static Mode)
- Play List
- Sequential Play
- Slide Bar

H/W Specification

TS Out Module (User Select)

DVB-ASI Output PCI Card	DVB-SPI (LVDS) Output PCI Card
Output bit rate : 0 ~ 214Mbps Packet Size : 188/204 Byte Dual 16MByte Buffer Memory Null Packet Insertion from H/W	Physical Layer : DVB/SPI (LVDS) Output bit rate : ~ 108Mbps DVB/SPI Connector : 25-pin sub-D 8-Mbytes on-board buffer Packet Size : 130, 188, 192, 204 Byte Low Host CPU Occupation Architecture

Modulation Characteristics (User Select)

DVB-T(COFSM) Modulator	DVB-C (QAM-A/C) Modulator
COFSM Modulator and VHF/UHF Up-converter (DVB-T) Input : MPEG2 TS from host memory Modulation Modes QPSK, 16/64 QAM Frequency Range: 50~ 862MHz (VHF/UHF) RF Output Level : -10dBm ~ -70dBm Output Level Step Size : 1dB Channel Bandwidth : 5/6/7/8 MHz COFSM Spectrum : 2K, 4K and 8K carriers Modulation Mode : QPSK, 16QAM and 64QAM Guard Interval : 1/32, 1/16, 1/8 and 1/4 Code Rate : 1/2, 2/3, 3/4, 5/6, 7/8	Modulation Modes 32/64/128/256 QAM Frequency Range 50 – 862 MHz FEC ITU-T J83 FEC annex A/C RF Output Level -10 ~ -70dBm Output Level Step Size : 1dB Output Impedance 75Ω Return Loss >20dB
Opencable (QAM-B) Modulator	DVB-S(QPSK) Modulator
Modulation Modes 32/64/128/256QAM Frequency Range 50 – 862 MHz FEC ITU-T J83 FEC annex B RF Output Level -10 ~ -70dBm Output Level Step Size : 1dB Frequency Stability 2ppm Output Impedance 75Ω	Integrated L-Band Up-converter with on-board RF Frequency : 950...2150 MHz Output Level : -10 ~ -70 dBm Symbol Rate Accuracy : < ± 25 ppm

Operating specification

Voltage :	AC 100 ~ 240V, 50/60Hz
Operating temperature :	10 to 40 degree
Operating humidity :	45 ~ 85% RH
Guaranteed temperature:	15 to 35 degree
Guaranteed humidity :	45 ~ 85% RH
Dimensions :	377(W) x 360(D) x 162(H)mm
Weight :	About 9kg



Ordering Information

Base Model	Description	Notes
DSG300	DTV Signal Generator. * RF Level : -10 ~ -70dBm * RF Level Step Size : 1dB * Multi Modulator / Single RF	* Should be combined more than 1 option among "Options S" * Supports only single RF

Options	Description	Notes
Option S	S-301	DVB-T Module
	S-302	ATSC Module
	S-303	DVB-C (Annex – A/C) Module
	S-304	Opencable Module
	S-307	DVB-S Module
Option B	B-101	ASI Out Module
	B-102	SPI Out Module
	B-201	AWGN Module (Not supported)
	B-202	Fading Module (Not supported)
	B-001	Portable carrying case with wheels
	B-100	Option Upgrade Service



Frame Specification

Frames (User Select)		
Type	Specification	Model
Standard Frame 1	<ul style="list-style-type: none"> Display : 10.4" LCD with touch screen (1024X768) HDD : 160G or higher OS: Windows XP Professional ODD: DVD Rom & CD RW Combo Dimension : 450(W) X433(D)X230(H) mm Ethernet, USB 2.0 * CE, FCC marked 	
Portable Frame	<ul style="list-style-type: none"> Display : 12.1~15.1 inch TFT LCD Front Panel (800x600~1024x768) HDD : 160GB ~ 400GB Max. OS: MS Windows 2000 or XP ODD: DVD-RW COMBO (DVD Recorder Optional) Dimension : 400(W)X291(D)X213(H) mm / 15.7"X11.4"x8.3" Ethernet, USB 2.0 * CE, FCC, UL, CCC marked 	
Super Portable Frame	<ul style="list-style-type: none"> Display : 12.1inch X GA LCD (1024X768 : Standard) 14,1inch X GA LCD (1024X768 : Optional) HDD : 80GB ~120GB ODD: DVD-RW COMBO (DVD Recorder Optional) OS : Windows XP 12-32VDC car adapter Expansion unit W/2*PCI (3/4 size) Dimension : 310(W)x255(D)x70(H) mm / 12.2"x10"x2.8" * CE, FCC, UL, CCC marked 	
Standard Frame 2	<ul style="list-style-type: none"> Display : 6.4" TFT LCD Front Panel (640X480) with touch screen HDD : 80GB OS : Windows XP Pro Ethernet, USB2.0 Dimension : 377(W)x360(D)x162(H)mm 	
Handheld Frame	<ul style="list-style-type: none"> Display : 10.4" TFT LCD Front Panel (1024X768) with Touch Screen HDD : 40GB~100GB OS : Windows XP Pro Ethernet, USB2.0 Dimension : 11.7'(W)x9.4'(D)x1.7'(H) 	
Ultra Frame	<ul style="list-style-type: none"> Large LCD with Touch Screen Pentium 4, 3.0G Embedded OS Memory 1G / HDD200G DVD Rom / CD RW Combo 	

