

High Dynamic 1X32 Signal Distribution 100 kHz...4000 MHz

Features

- wideband 100 kHz...4000 MHz
- high dynamic
- lossless in level
- monitor ports

Applications

- AM, FM, DAB3, DAB-L, GNSS, SDARS, DVB-T
- duplication of generator and antenna signals
- test signal distributions
- receiving systems
- final testing



Scope

The WSDU-1X32 is a high dynamic wideband signal duplication for the frequency range 100 kHz...4000 MHz and thereby suitable for all common broadcast standards. It distributes, lossless in level, one signal to 32 outputs.

1 to 32 Distribution Lossless in Level

The RF input signal is amplified by using wideband low-noise noise amplifier stages with a wide dynamic range. As a result, the duplicated input signal is available at the 32 outputs of the WSDU-1X32 without any loss in level. All inputs and outputs have SMA female connectors.

High Port-to-Port Isolation

WSDU-1X8 modules inside the rack features a high port-to-port isolation. Thus, the connected devices are prevented from affecting each other.

Modular Design

The design of the WSDU-1X32 is modular. It is easily expandable to more output channels by adding WSDU-1X8 "1X8 wideband signal distribution" modules into free slots of the SR6-11C system platform.

Easy Maintenance

The auxiliary ports of WSDU-1X8 modules offers RF signal monitoring without interruption the operation. The monitor port is located on the front side of the modules.

Short Specifications

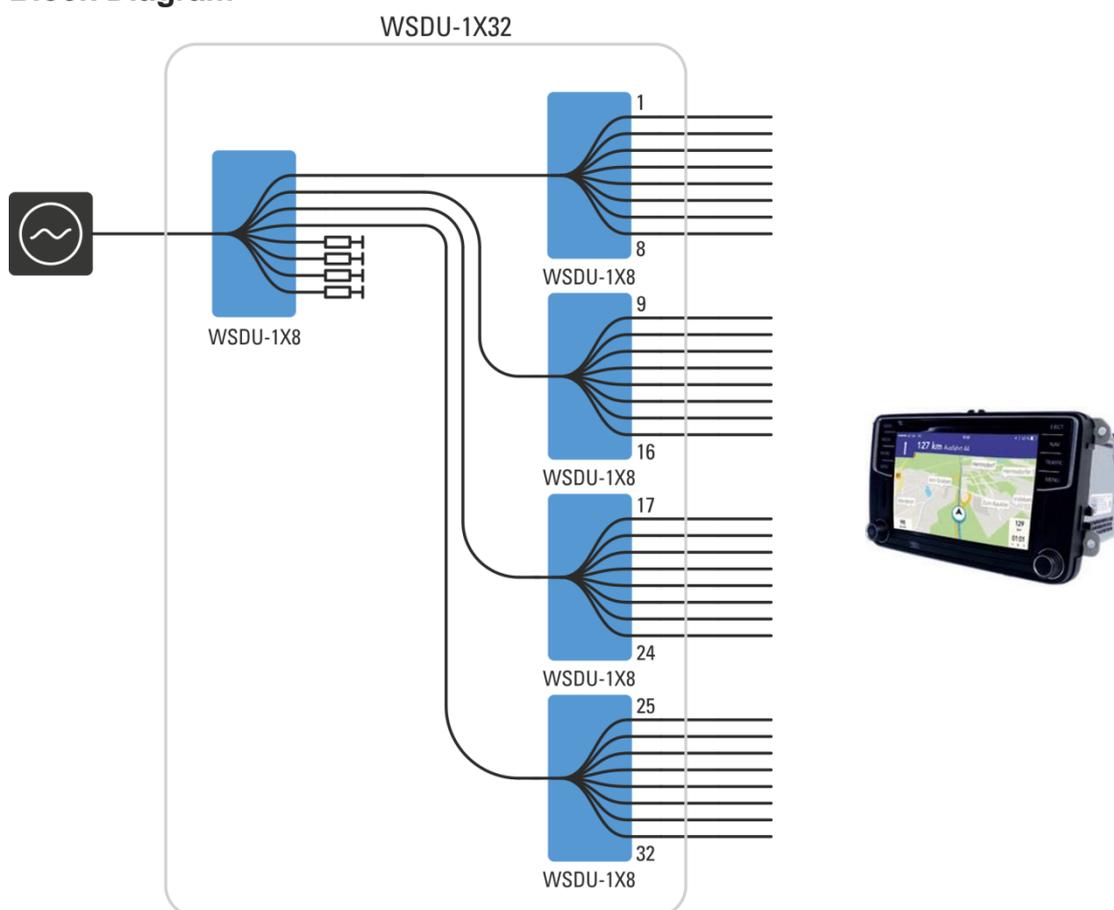
Parameter	Symbol	Min	Typ	Max	Unit	Condition
impedance	Z		50		Ohm	
number of RF inputs	n_i		1			
number of RF outputs	n_o		32			
low frequency	f_{min}		100	150	kHz	
high frequency	f_{max}	4000	5000		MHz	
RF power	P_{in}			+15	dBm	CW, no damage
connectors		SMA female				

For more details please refer datasheet of slot-in module WSDU-1X8.

Common Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
input voltage	V_{in}	90		260	V_{AC}	50 / 60 Hz
input harmonics		compliant EN61000-3-2				
power consumption	P		80		W	
dimensions	W x H x D	approx. 482 x 267 x 180			mm	19" 6 U
weight			7		kg	
operating temp. range	T_o	+5		+40	°C	ambiance
storage temp. range	T_s	-40		+70	°C	
ordering information	P/N:	1202.6602.1		WSDU-1X32		
designation	High Dynamic 1X32 Signal Distribution					

Block Diagram



The block diagram shows the arrangement for supplying 32 RF signals from one signal source.



Front View



Rear View



Rear view shows WSDU-1X32 wideband signal distribution equipped with RF cables in the 1X32 configuration. Unused outputs are terminated by 50 ohm SMA resistors. (Located on the lower section of module on the left side).

Related Products

Product	Description	P/N
SR6-11C	6 U Universal System Platform with 11 Slots for RF Modules	1409.1202.1
SR6-CU	Controller Module for SR6-11C System Platform with USB & LAN Interface	1409.3000.1
WSDU1X8	High Dynamic 1X8 Multicoupler Slot-In Module 100 kHz ... 4000 MHz	1202.6100.1
SMASMA-50	RF Cable SMA SMA, l = 50 cm (recommended for RF cabling between modules)	1202.0247.1
PT-4CS	4 Channel Programmable DC Current Sink, 0...400 mA	1605.2020.1
FDMX	Frequency De-Multiplexer for Broadcast and Navigation Signals	1310.6003.1
FDMX-PT	Frequency De-Multiplexer for Broadcast and Navigation Signals with programmable current sinks	1310.6003.2

