

# WISI VX 53 B

Compact Line CATV Amplifier



## Description

The VX 53 B is a remote feeding universal line and distribution amplifier that has one active output and additional slots for return channel amplifiers, control modules, diplex filter modules and splitter/tap modules. All settings can be accessed via an OH 41 handset or an Android app via Bluetooth.

## At a glance:

- Compact 1 GHz / 1,2 GHz high level CATV amplifier
- Remote powered
- All settings (gain, slope etc.) by WISI control unit (OH 41 Handset) or Android app via bluetooth
- Includes interface for NMS functionality: HMS or DOCSIS
- Management functionality according to EN 60728-14 available (ICS setting)
- Diplex filters and splitter / tap modules pluggable
- High level upstream amplifier pluggable
- ALSC module pluggable (VX 58B)
- Additional universal plug in modules

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## Technical data

### Down-Stream / DS

Frequency range downstream	85...1218 MHz (1 GHz/1,2 GHz equalizer switchable)
Gain downstream	46 dB ( $\pm 0,75$ dB), (single output)
Frequency response	$\leq \pm 0,5$ dB
Noise figure	$\leq 6,5$ dB @ 1 GHz, $\leq 8,0$ dB @ 1,2 GHz
Output level	115 dB $\mu$ V (CENELEC 42 Ch. (CSO/CTB $\geq 60$ dB), flat)
Output level	118 dB $\mu$ V (CENELEC 42 Ch. (CSO/CTB $\geq 60$ dB), 9 dB slope @ 862 MHz)
Output level	109 dB $\mu$ V (all QAM (138 x 256 QAM), EN60728-3-1, flat)
Output level	111 dB $\mu$ V (all QAM (138 x 256 QAM), EN60728-3-1, 12 dB slope @ 1218 MHz)
Input return loss	$\geq 20$ dB (-1,5 dB/Oct.)
Attenuator downstream	0...20 dB (0,1 dB steps)
Interstage attenuator downstream	0...20 dB (1 dB steps)
Equalizer downstream	0...15 dB (0,1 dB steps)
Interstage equalizer downstream	0...15 dB (1 dB steps)
RF test points	-20 dB

### Upstream (US)

Frequency range upstream	5...204 MHz (65/ 85/ 117 MHz optional)
High pass filter switchable	12 MHz
Gain upstream	30 dB
Frequency response upstream	$\leq \pm 0,5$ dB
Noise figure upstream	$\leq 5,5$ dB
Output level	115 dB $\mu$ V (CLC/TS50083-3-3 (BER $\leq 1$ E-8, MER $\geq 35$ dB), 5...65 MHz (6 x 64 QAM))
Output level	111 dB $\mu$ V (CLC/TS50083-3-3 (BER $\leq 1$ E-8, MER $\geq 35$ dB), 5...204 MHz (22 x 64 QAM))
NPR (>50 dB) EN60728-3	16 dB $\mu$ V/Hz (max. input level (60 MHz load), 26 dB dyn. range)
NPR (>50 dB) EN60728-3	12 dB $\mu$ V/Hz (max. Input level (200 MHz load), 23 dB dyn. range)
Return loss upstream (in / output)	$\geq 20$ dB (-1,5 dB/Oct.)
Attenuator upstream input	0...30 dB (1 dB steps)
Attenuator upstream output	0...30 dB (1 dB steps)
Equalizer US	0...15 dB (0,5 dB steps)
ICS, US	0/ -6/ < -45 dB
Upstream test point	-20 dB
RF injection point	-20 dB

### General data

RF connectors	PG11/F
Impedance	75 $\Omega$
Supply voltage	27...65 V AC
Power consumption	25,0 W (ALSC module max. 2,5 W, Transponder max. 3,5 W)

## Technical data

Remote power current in and outputs	< 10 A
Surge protection power supply	2 kV (1,2/50 $\mu$ s pulse EN61000-4-5)
Hum modulation @ 7A, f > 15 MHz	> 70 dB
Ambient temperature	-20...+65 $^{\circ}$ C
Protection class	IP67
EMC	EN 50083-2
Surge protection RF ports	6 kV (1,2/50 $\mu$ s pulse EN61000-4-5)
Dimensions (width x height x depth)	260 x 215 x 100,4 mm

## NMS / Handset / BT App Functionality

<b>Downstream</b>	
Monitoring:	control level deviation, attenuator, equalizer, slope settings, pilot level state, pilot frequency, RF power level, 5V/24V supply voltage
Configuration:	input attenuator, interstage attenuator, input equalizer, interstage slope, attenuator output 1, ALSC adjustment, equalizer frequency 1/1,2 GHz
Alarms:	pilot level too high/low, control level deviation
<b>Upstream</b>	
Monitoring:	attenuator/slope setting, ICS switch position
Configuration:	input attenuator, output attenuator, slope, ICS, HP on/off

## Packaging data

Sales unit	1 pcs.
Dimensions (WxHxD) sales unit	350 x 290 x 175 mm
Packaging volume sales unit	dm <sup>3</sup>
Gross weight sales unit	3.55 kg
Shipping unit	1 pcs.
Dimensions (WxHxD) shipping unit	mm
Packaging volume shipping package	15 dm <sup>3</sup>
Gross weight shipping unit	3.655 kg
EAN	4010056738099
Article number	73809
Customs tariff number	85437030