

VBS 2000

Features

- Low cost
- Adjustment-free operation (Automatic Gain Control)
- Easy to install
- Compact stand-alone and rack-mount cards
- Video SNR >60 dB for short link



AM

Description

The VBS 2000 series offers a complete range of low-cost fiber optic video transmitters and receivers. Built-in Automatic Gain Control (AGC) allows plug and play installation and maintenance-free operation. VBS transmitters and receivers are available in stand-alone or rack-mount housings for both single- and multimode applications.

The very compact VBS 2020 TX and VBS 2050 TX transmitters are designed to operate over a broad temperature range and are, therefore, suitable to be used close to a camera, or even inside outdoor camera housings. The rack-mount versions are designed to be slotted into MC 11 power-supply cabinets. Rack-mount models are also

available as stand-alone units (/SA versions). The space-saving VBS 2020 TX-3 transmitters and RX-3 receivers can provide up to 33 video transmission links, using only a single MC 11 power-supply cabinet at each location.

The compact VBS 2020 and 2050 stand-alone transmitters are to be powered by a PSA 12 DC power adapter or a PSR 12 DC power-supply unit, the latter for extreme environmental conditions.

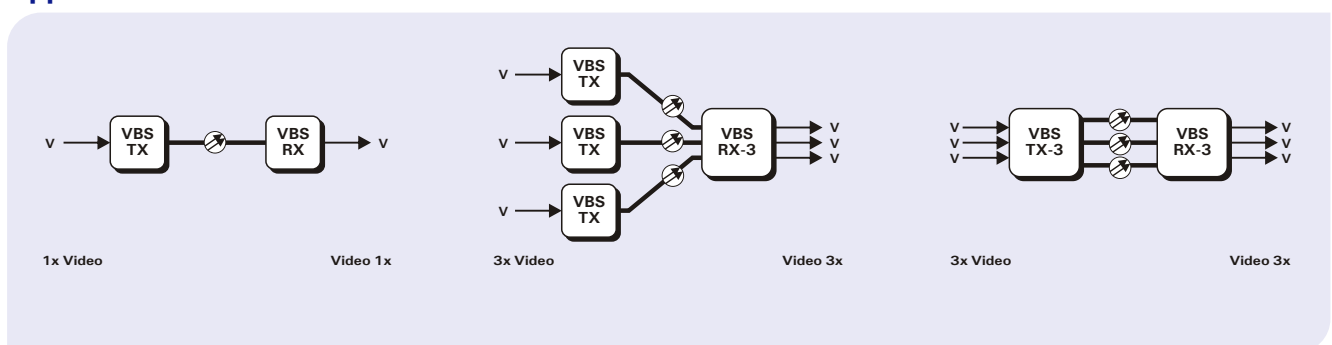
VBS 2050 rack-mount transmitter and receiver models for single-mode fiber are SNM™ compatible.

Ordering information

Model	Description	Fiber type	Wavelength(s)	Budget	Housing	Managed
VBS 2010 TX VBS 2010 RX	Video transmitter Video receiver	MM	850 nm	18 dB ¹	rack-mount	-
VBS 2020 TX VBS 2020 TX-3 VBS 2020 RX-3	MatchBox video transmitter Triple video transmitter Triple video receiver	MM	850 nm	18 dB ¹	stand-alone rack-mount rack-mount	- - -
VBS 2050 TX VBS 2050 TX-3 VBS 2050 RX-3	MatchBox video transmitter Triple video transmitter Triple video receiver	SM	1300 nm	12 dB	stand-alone rack-mount rack-mount	- SNM SNM
VBS 20xx /SA	Stand-alone versions of rack-mount models				stand-alone	-

¹): For 50/125 μ fiber subtract 4 dB.

Applications



Technical Specifications

Video

Video format	PAL/SECAM/NTSC
In-/output level	1 Vpp (±3 dB)
Bandwidth (-3 dB)	10 MHz
Differential phase	< 5°
Differential gain	< 5%
SNR	
Short link	> 60 dBw
Over opt. budget	> 45 dBw
Connector type	BNC 75 Ω (gold-plated centerpin)

Powering

Power consumption	
VBS 2010 TX	0.5 W
VBS 2010 RX	1.7 W
VBS 2020 TX	0.5 W
VBS 2020 TX-3	1.3 W
VBS 2020 RX-3	5.2 W
VBS 2040 TX	0.75 W
VBS 2040 RX	1.9 W
VBS 2050 TX	0.75 W
VBS 2050 TX-3	1.7 W
VBS 2050 RX-3	6 W
Rack-mount units	MC 10 and MC 11 power-supply cabinets
Stand-alone units	
VBS 20xx /SA	11 to 16 Vdc (PSA 12 DC, PSA 12 DC/25 or PSR 12 DC)
VBS 2020/2050 TX	8 to 25 Vdc

Management

LED status indicators	
DC	Power-on indicator (green)
NV	No video signal on in- or output
Network management	SNM™ compatible
SNM™ variables	Voltages, module temperature, alarm status (VBS 2050 only)

Environmental

Operating temperature	-40 to +74°C
Relative humidity	< 95% (no condensation)
MTBF	> 100,000 h
Safety & EMC	IEC/EN 60950, IEC/EN 60825, IEC/EN 61000 EN 50130-4, EN 50081-1, IEC/EN 55022, FCC-15

Mechanical

	VBS 2020/2050 TX	Others
Dimensions (hxwx d)	33 x 60 x 90 mm	35 x 128 x 190 mm
Weight (approximately)	140 g	450 g

Optical	VBS 2010 TX - RX	VBS 2020 TX - RX	VBS 2050 TX - RX		
Fiber type	MM	MM	SM		
System budget	18 ¹ dB	18 ¹ dB	12 dB		
Min. link loss	0 dB	0 dB	0 dB		
Output power	> -18 dBm	> -18 dBm	> -28 dBm		
Output wavelength	850 nm	850 nm	1300 nm		
Input sensitivity	< -36 dBm	< -36 dBm	< -40 dBm		
Connector type	ST	ST	ST		

¹): For 50/125 μ fibre subtract 4 dB.

