Features

- Optical AM video transmitters and receivers
- Adjustment-free installation and operation (automatic gain control)
- Easy to install
- Multichannel versions for high channel density
- Compact stand-alone and rack-mount versions
- Wide temperature range
- Video SNR >60 dBw for short link
- Compatible with Pico series

VBS 2000

Video transmitters and receivers

Description

Siqura's VBS 2000 series offers a complete range of low-cost fiber optic AM video transmitters and receivers. Built-in automatic gain control (AGC) allows plug-and-play installation and maintenance-free operation. VBS 2000 transmitters and receivers are available for both single-mode and multimode applications.

The very compact VBS 2020 TX and VBS 2050 TX matchbox transmitters are designed to operate over a broad temperature range and are therefore suitable for use close to cameras or even inside outdoor camera housings.

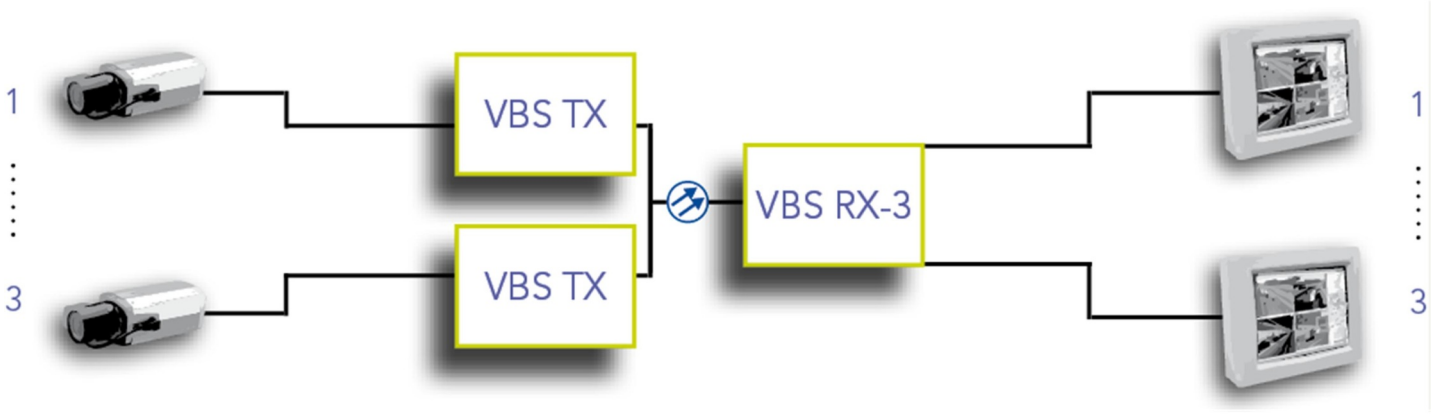
Regular VBS transmitters and receivers are available in stand-alone or rack-mount housings. The rack-mount versions are designed to be slotted into MC 10 or MC 11 power supply cabinets. Stand-alone versions (/SA) can be mounted on any flat surface.

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 10 or MC 11 power supply cabinet at each location.

The compact VBS 2020 and 2050 matchbox transmitters and all other VBS stand-alone transmitters and receivers are powered by a PSA-UN12DC power adapter or, for extreme environmental conditions, a PSR-12 DC power supply unit.

VBS 2000 receivers are compatible with Siqura's miniature Pico™ transmitters.

Technical Specifications
VBS 2000



Video	
Video format	NTSC, PAL, SECAM
Input/output level	1 Vpp (±3 dB)
Bandwidth (-3 dB)	10 MHz
Differential phase	<5.0°
Differential gain	<5.0%
Signal-to-noise ratio	
Short link	>60 dBw
Over optical budget	>45 dBw
Connector type	75 Ω BNC (gold-plated center pin)

Management	
LED status indicators	
DC	Power-on indicator (green)
NV	No video on input or output (red)

Environmental	
Operating temperature	-40 °C to +74 °C (-40 °F to +165 °F)
Storage temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Relative humidity	<95% with no condensation
MTBF (mean time between failures)	>100,000 hours
Safety and EMC	IEC/EN 60950-1, IEC/EN 60825, IEC/EN 61000, EN 50130-4, EN 50081-1, EN 55022, FCC part 15, UL

Technical Specifications
VBS 2000

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 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 (/SA)	
VBS 20xx /SA	11 to 16 Vdc (PSA-UN12DC or PSR-12DC)
VBS 2020/2050 TX	8 to 25 Vdc

Mechanical

VBS 2020/2050 TX	
Dimensions (h x w x d)	33 x 60 x 90 mm (1.3 x 2.4 x 3.5 in)
Weight	140 g (4.93 oz)
Rack-mount units	
Dimensions (h x w x d)	128 x 35 x 190 mm (5.0 x 1.4 x 7.5 in)
Weight	450 g (15.9 oz)

Optical

	VBS 2010 TX/RX	**VBS 2020** TX/RX	**VBS 2050** TX/RX
Fiber type	MM (62.5 µm)	MM (62.5 µm)	SM (9 µm)
Output wavelength	850 nm	850 nm	1300 nm
System link budget	16 dB*	16 dB*	12 dB
Link length	5 km	5 km	24 km
Minimum link loss	0 dB	0 dB	0 dB
Output power	>-18 dBm*	>-18 dBm*	>-28 dBm
Input sensitivity	-34 dBm	-34 dBm	-40 dBm
Connector type	ST	ST	ST

*For 50/125 µm fiber, subtract 4 dB.

Technical Specifications
VBS 2000

Ordering information

Models	Description	Fiber type
VBS 2010 TX	Video transmitter	1x MM
VBS 2010 RX	Video receiver	1x MM
VBS 2020 TX	Video transmitter, matchbox	1x MM
VBS 2020 TX-3	Video transmitter, triple	3x MM
VBS 2020 RX-3	Video receiver, triple	3x MM
VBS 2050 TX	Video transmitter, matchbox	1x SM
VBS 2050 TX-3	Video transmitter, triple	3x SM
VBS 2050 RX-3	Video receiver, triple	3x SM
VBS 20xx /SA	Stand-alone version of rack-mount models	