## Up-the-Fiber™ 4200 Bilinx™

# Digital video transmitter with Bosch Bilinx™ protocol

#### **Features**

- High-quality 9-bit video ≥63 dBw SNR
- Bosch Bilinx™ up-the-coax protocol
- Miniature transmitters <2x2x1 inch
- High-density receivers
- 12 VDC and 24 VAC direct powering
- Alarm contact
- Unique time-saving connection and configuration









### Description

On an extremely small footprint, Sigura's fiber optic Up-the-Fiber™ series provides high-quality, 9-bit digitized video transmission supporting Bosch's Bilinx™ protocol over extended distances. UTF 4200 exceeds the normally limited Bilinx™ protocol using digital processing and intelligent features.

The UTF 4200 uses either one single-mode or one or two multimode optical fibers and also features an isolated contact closure output to transport alarms from the camera (anti-tamper or door contact).

The miniature stand-alone transmitters are suitable to be used within outdoor camera housings or camera connection boxes. UTF 4200 receivers are also available as stand-alone units (/SA).

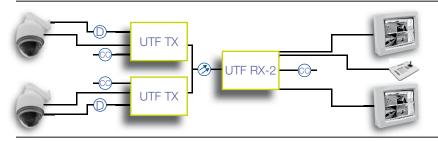
#### Ordering Information

| Models   | Description  | Fiber Type              |
|--|--|-------------------------|
| UTF 4200 TX-MSA/Bilinx<br>UTF 4200 RX/Bilinx<br>UTF 4200 RX-2/Bilinx | Miniature digital video transmitter with CC for Bosch Bilinx™ Digital video receiver with CC for Bosch Bilinx™ Dual digital video receiver with CC for Bosch Bilinx™ | 2x MM<br>2x MM<br>2x MM |
| UTF 4210 TX-MSA/Bilinx<br>UTF 4210 RX/Bilinx<br>UTF 4210 RX-2/Bilinx | Miniature digital video transmitter with CC for Bosch Bilinx™ Digital video receiver with CC for Bosch Bilinx™ Dual digital video receiver with CC for Bosch Bilinx™ | 1x MM<br>1x MM<br>1x MM |
| UTF 4250 TX-MSA/Bilinx<br>UTF 4250 RX/Bilinx<br>UTF 4250 RX-2/Bilinx | Miniature digital video transmitter with CC for Bosch Bilinx™ Digital video receiver with CC for Bosch Bilinx™ Dual digital video receiver with CC for Bosch Bilinx™ | 1x SM<br>1x SM<br>1x SM |
| UTF 42xx/Bilinx /SA In-dome mounting bracket                         | Stand-alone version of rack-mount models  Bracket to mount a UTF TX-MSA inside a Bosch AutoDome® or EnviroDome®  |                         |



## Up-the-Fiber™ 4200 Bilinx™ Technical specifications

# Digital video transmitter with Bosch Bilinx™ protocol





Bosch Dome Camera Application with an In-Dome Mounting Bracket

#### Video

Number of channels NTSC, PAL, SECAM Video format

Input/output level 1 Vpp (±3 dB) Bandwidth (-3 dB) 6 MHz Sampling resolution 9-bit effective Group delay <20 ns <2% Differential gain Differential phase <1°

>63 dB (weighted) SNR

BNC 75 $\Omega$  (gold-plated center pin) Connector type

Data

1 (full-duplex) Number of channels Data interfaces Up-the-coax Bosch Bilinx™ Interface support

Management

LED status indicators

Network Management

TX models Power-on (green); local synchronization

error (red); remote synchronization error

(vellow)

RX models NV: No video on input or output (red)

SYNC: Operational link (green), local synchronization error (red); remote

synchronization error (yellow) SNM™ compatible

SNM™ variables PS voltages, module temperature, module

status, configuration, etc.

#### Environmental

-40° C to +74° C (-40° F to +165.2° F) Operating temperature -55° C to +85° C (-67° F to +185° F) Storage temperature Relative humidity <95% as long as there is no condensation. MTBF >250.000h

IEC/EN 60950-1, IEC/EN 60825, Safety and EMC IEC/EN 61000, EN 50130-4, EN 50081-1,

EN 55022, FCC part 15

450g (15.87 oz.)

128 x 71 x 190 mm (5 x 2.8 x 7.48 in.)

**Physical** 

Stand-alone

45 x 45 x 25 mm (1.77 x 1.77 x 0.98 in.) Dimensions (h x w x d) Weight (approx.)

250g (8.81 oz.)

Rack-mount

Dimensions (h x w x d) Weight (approx.)

Contact Closure

Number of channels +3.3V pull-up,  $2.2~k\Omega$ Input (TX)

Threshold

Output (RX) Fail-safe, potential-free; 100 mA/50V

Power Requirements

Power consumption

Back-mount units MC 10 and MC 11 power supply cabinets Stand-alone option (/SA) 12 VDC (PSA-UN12DC with Ferrules or

PSR-12 DC)

12 VDC (PSA-UN12DC with Ferrules or Miniature stand-alone transmitters

PSR-12 DC) or 24 VAC

| Optical            | UTF 4200<br>TX/RX     | UTF 4210<br>TX/RX   | UTF 4250<br>TX/RX   |
|--------------------|-----------------------|---------------------|---------------------|
| Fiber type         | 2x MM (62.5)          | 1x MM (62.5)        | 1x SM (09)          |
| System link budget | 23 dB <sup>2</sup>    | 23 dB               | 23 dB               |
| Link length        | 6 km <sup>1</sup>     | 6 km <sup>1</sup>   | 46 km               |
| Minimum Link Loss  | 0 dBm                 | 0 dBm               | 9 dBm               |
| Output power       | >-12 dBm <sup>2</sup> | >-12 dBm / >-12 dBm | >-12 dBm / >-12 dBm |
| Input sensitivity  | -35 dBm               | -35 dBm / -35 dBm   | -35 dBm / -35 dBm   |
| Transm. wavelength | 1300 nm               | 1310 nm / 1550 nm   | 1310/1550 nm        |
| Connector type     | SC                    | SC                  | SC                  |

For 50/125 µm fiber, subtract 4 dB. <sup>2</sup> Distance limited due to fiber bandwidth.





