

UTF 4200 MULTIMODE



- **Up-the-fiber™ DIGITAL**
- High-quality 9-bits video (SNR > 63 dB) over any one or two multimode fibers
- Miniature transmitters < 2x2x1 inch
- High-density receivers
- 12 Vdc and 24 Vac direct powering
- High-speed data channel supporting all major PTZ/dome camera's
- Alarm contact
- Unique time-saving PTZ connection and configuration (EasyC-s™)

Description

On an extremely small footprint, NKF's *Up-the-Fiber™* digital line equipment provides high-quality, 9-bit digitized video transmission with bidirectional data, at an exceptionally low price. UTF systems work with one or two multimode optical fibres. *Up-the-Fiber™* receivers can handle one or two video/data/CC channels. The UTF module supports EasyC-s™. With EasyC-s™ a group of receivers needs only one (!) external data connection,

simplifying system implementation and maintenance. The data port needs only to be configured on the receiver; the transmitter automatically follows. The bidirectional RS-485/422 data interface supports PTZ data of all types of camera interfaces (RS-485, TTY, Manchester, biphas, SensorNet, etc.). In addition, the module offers a potential-free alarm contact for e.g. Door contacts, anti-tamper contacts, etc.

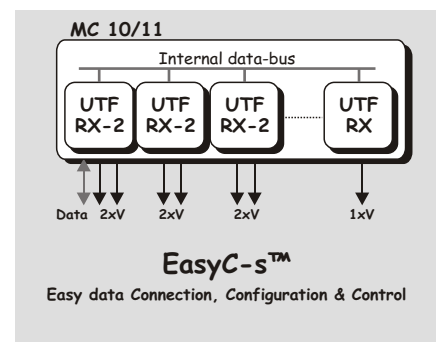
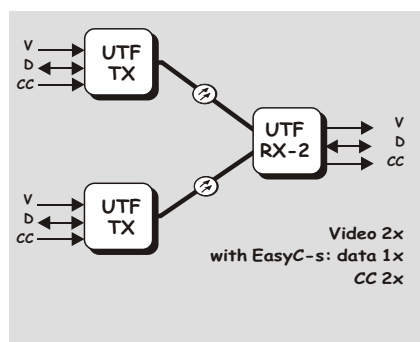
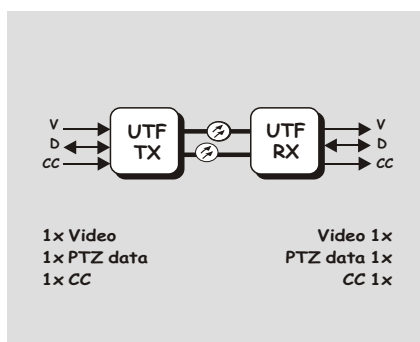
Their wide operating temperature range makes the compact, stand-alone transmitters suitable for use within for instance outdoor camera housings and camera connection boxes. UTF receivers are also available as stand-alone units. The UTF receivers are managed with NKF's Smart Network Management (SNM™).

Ordering information

Model	Description	Fibre type	Budget	Housing	Managed
UTF 4200 TX-MSA	Miniature digital video transmitter with CC and 2-way data	2x MM	15 dB ^{*)}	stand-alone	SNM
UTF 4200 RX	Digital video receiver with CC and 2-way data	2x MM	15 dB ^{*)}	rack-mount	SNM
UTF 4200 RX-2	Dual digital video receiver with CC and 2-way data	2x MM	15 dB ^{*)}	rack-mount	SNM
UTF 4210 TX-MSA	Miniature digital video transmitter with CC and 2-way data	1x MM	23 dB ^{*)}	stand-alone	SNM
UTF 4210 TX	Digital video transmitter with CC and 2-way data	1x MM	23 dB ^{*)}	rack-mount	SNM
UTF 4210 TX-2	Dual digital video transmitter with CC and 2-way data	1x MM	23 dB ^{*)}	rack-mount	SNM
UTF 4210 RX	Digital video receiver with CC and 2-way data	1x MM	23 dB ^{*)}	rack-mount	SNM
UTF 4210 RX-2	Dual digital video receiver with CC and 2-way data	1x MM	23 dB ^{*)}	rack-mount	SNM
UTF 42xx /SA	Stand-alone version of rack-mount models	-	-	stand-alone	SNM

^{*)} For 50/125µ fibre subtract 4 dB. The maximum distance may be limited to 6 km or less due to dispersion.

Applications



Technical Specifications

UTF 4200 MULTIMODE

Video

Number of channels	1
Video format	PAL/SECAM/NTSC
In-/output level	1 Vpp (±3 dB)
Bandwidth (-3 dB)	6 MHz
Sampling resolution	9-bit effective
Group delay	< 20 ns
Differential gain	< 2%
Differential phase	< 1°
SNR	> 63 dB (weighted)
Connector type	BNC 75 (gold plated center-pin)

Powering

Power consumption	< 3 W
Rack-mount units	MC 10 and MC 11 cabinets
Stand-alone option (/SA)	12 Vdc
Miniature standalone transmitters	12 Vdc or 24 Vac

Management

LED status indicators	
TX models:	Power-on (green); local synchronization error (red); remote synchronization error (yellow)
RX models:	NV: No video on in- or output (red) SYNC: Operational link (green), local synchronization error (red); remote synchronization error (yellow)
Network Management	SNM™ compatible
SNM™ variables	PS Voltages, module temperature, module status, configuration, etc

Environmental

Operating temperature	-40 to +74°C
Relative humidity	< 95% (no condensation)
MTBF	> 250,000 h
Safety & EMC	IEC/EN 60950-1, IEC/EN 60825, IEC/EN 61000 EN 50130-4, EN 50081-1, EN 55022, FCC part 15

Mechanical

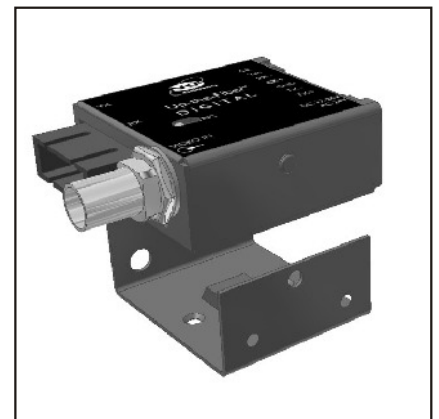
Dimensions (hwxwd)	Stand-alone 45 x 45 x 25 mm	Rack-mount 128 x 71 x 190 mm
Weight (approx.)	250 g	450 g

Data

Number of channels	1 (full duplex)
Data interfaces	RS-422/485 (2- or 4 wire)
Interface support	Current loop, TTL, TTY, Manchester, Biphas
Data format	Asynchronous, serial
Data rate	DC to 230 kb/s
Connector type	6-p screw terminal
EasyC-s™	Backplane databus wiring and single-point configuring (RX)

Contact Closure

Number of channels	1
Input (TX)	+3.3 V pull-up, 2.2 kΩ, 1.4 V
Threshold	
Output (RX)	Fail-safe, pot.-free; 100 mA/50V



Optical	UTF 4200		UTF 4210	
	TX - RX		TX	RX
Fibre type	2x MM		1x MM	
System budget	15 dB		23 dB	
Min. link loss	0 dB		0 dB	
Output power	> -17 dBm	> -12 dBm	> -12 dBm	
Output wavelength	1300 nm	1310 nm	1550 nm	
Input sensitivity	-32 dBm	-35 dBm	-35 dBm	
Connector type	SC		SC	

