

# Up-the-Fiber™ singlemode



- High quality 9-bits video (SNR > 63dB) over one or two singlemode fibers
- Miniature transmitters < 2x2x1 inch
- High density receivers
- DC and AC camera powering
- High speed bi-directional (230 kbit/s) data channel supporting all major PTZ/dome camera's
- Alarm contact
- Unique time saving PTZ connection and configuration (EasyC-s™)

## Description

On a 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 singlemode 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,

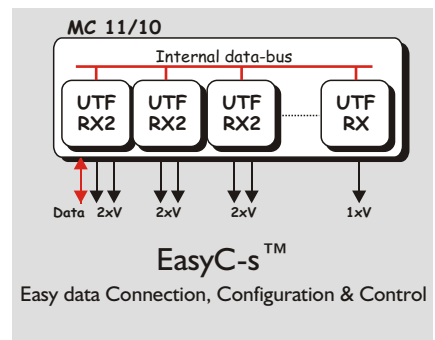
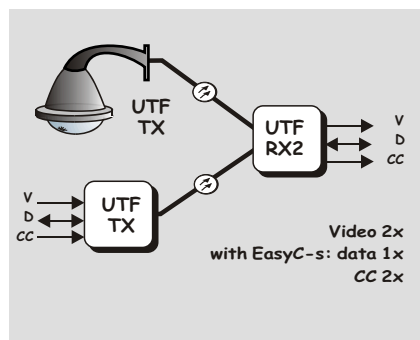
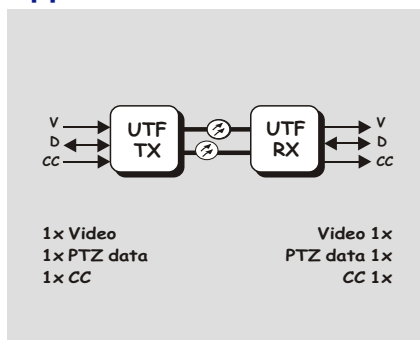
simplifying system implementation and maintenance. Also the data configuration needs only to be set at the receiver side. The bidirectional, fast RS-485/422 data interface caters for PTZ communication with all types of camera interfaces (RS-485, TTY, Manchester, biphasic, SensorNet, etc.). In addition the module offers an potential free alarm contact for e.g. door-contacts, anti-temper contacts, etc.

A 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. All stand-alone models can be powered by the camera power supply (12Vdc or 24 Vac), a PSU 12 DC being recommended in case of extreme environmental conditions. The UTF receivers are SNM compatible.

## Ordering information

Model	Description	Fibre type	Max. Distance	Housing	SNM
UTF 4240 TX-SA UTF 4240 RX UTF 4240 RX-2	Miniature digital video transmitter with CC and 2-way rs422/485 Digital video receiver with CC and 2-way rs422/485 Dual digital video receiver with CC and 2-way rs422/485	2x SM	40 km	stand-alone rack-mount rack-mount	yes yes yes
UTF 4250 TX-SA UTF 4250 TX UTF 4250 TX-2 UTF 4250 RX UTF 4250 RX-2	Miniature digital video transmitter with CC and 2-way rs422/485 Digital video transmitter with CC and 2-way rs422/485 Dual digital video transmitter with CC and 2-way rs422/485 Digital video receiver with CC and 2-way rs422/485 Dual digital video receiver with CC and 2-way rs422/485	1x SM	40 km	stand-alone rack-mount rack-mount rack-mount rack-mount	yes yes yes yes yes
UTF 4250 TX /Pelco UTF 4250 TX /Bosch	In-camera digital video transmitter with CC and 2-way rs422/485 In-camera digital video transmitter with CC and 2-way rs422/485	1x SM	40 km	In-camera	yes
UTF 42xx /SA UTF 4250 /HP	Stand-alone version of rack-mount models High-power version of the UTF 4250 models	- 1x SM	- 60 km	stand-alone -	yes yes

## Applications



## Technical Specifications

# Up-the-Fiber™ singlemode

### 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	< 3W
Rack-mount units	MC 10 and MC 11 cabinets
Stand-alone option (/SA)	12 Vdc
Miniature standalone transmitters	12Vdc 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	> 150,000 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 & weight	
Stand-alone	45 x 45 x 25 mm; 250 g
Rack-mount	128 x 71 x 190 mm; 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 V pull-up, 2 k 750mV
Threshold	750mV
Output (RX)	Fail-safe, pot.-free; 100mA/50V

Optical	UTF 4240 TX - RX	UTF 4240 TX/HP - RX/HP	UTF 4250 TX - RX	UTF 4250 TX/HP - RX/HP	
Wavelengths	1310 nm	1310 nm	1310/1550 nm	1310/1550 nm	
Fibre type	2x SM	2x SM	1x SM	1x SM	
System budget	23 dB	32	23 dB	32 dB	
Min. link loss	0 dB	0 dB	0 dB	0 dB	
Connector type	SC	SC	SC	SC	

