



Fibre Optic Transmission System

Video TX, TTY/RS422 RX

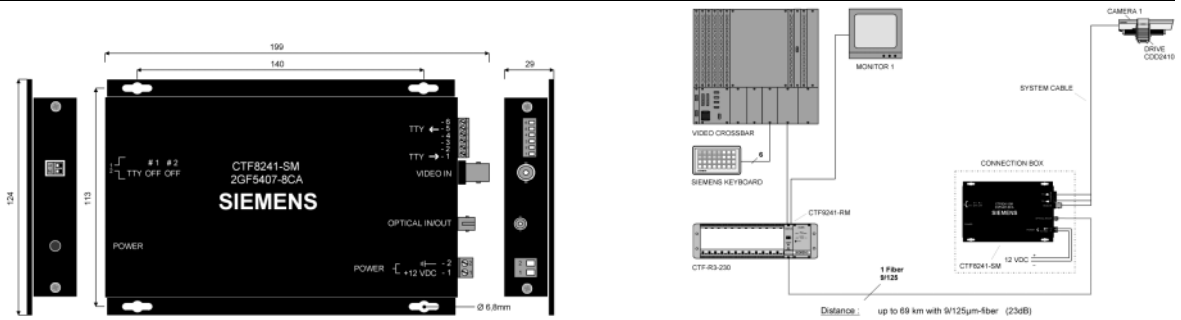
CTF8241-SM

1310/1550 nm, Surface Mount Module

- **Compatible with Siemens camera control units**
- **FM video transmission (TX) and data RX (TTY/RS422)**
- **NTSC, PAL, SECAM compatible**
- **Full colour compatibility**
- **No in-field electrical or optical adjustments required**
- **Power status indicating LED to monitor system performance**
- **Integrated WDM for greater product reliability**
- **Automatic resettable fuses on all power lines**

The CTF8241-SM video transmitter and current loop/RS422 receiver supports the simultaneous transmission of video and bi-directional data over one single mode optical fibre. Plug-and-Play design ensures ease of installation requiring no electrical or optical adjustments. The module incorporates a power status indicating LED to monitor proper system operation.

Module design and System design (example)



Technical data

Specifications	
<i>Data</i>	
Data interface	20 mA (TTY), RS422
<i>Video</i>	
Video input	1 V _{PP} (75 ohms)
Bandwidth	5 Hz to 8 MHz
Differential gain	< 5 %
Differential phase	< 5°
Tilt	< 1 %
Signal-to-noise ratio	> 55 dB at 10 dB ATTN
Wavelength	1310/1550 nm
Number of fibres	1
Fibre multi mode	9/125 µm
Optical power budget	
with 9/125 µm	23 dB
Output	200 µw (-7 dBm)
Connectors	
Optical	ST
Video	BNC (gold plated centre-pin)
Power	Terminal block with screw clamps
Data	Terminal block with screw clamps
Electrical and mechanical	
Power supply	12 V DC, 300 mA
Current protection	Automatic resettable solid-state current limiters
Circuit board	Meets IPC Standard
Dimensions (W x H x D)	124 x 29 x 199 mm
Weight	0.9 kg
Environmental	
MTBF	> 100,000 hours
Operating temperature	-40 to +74 °C
Storage temperature	-40 to +85 °C
Relative humidity	0 to 95%, no condensation

Ordering data

Type	Part no.	Designation	Weight
CTF8241-SM	2GF5407-8CA	Video Transmitter, Data Receiver, TTY/RS422 1310/1550 nm, Single Mode, 1 fibre, Surface mount	0.9 kg