

# NHD100S

Miniature 1-ch HD-SDI Video



## Description

The advanced NHD100S series supports optical transmission of non-compressed HD-SDI or SD-SDI signal format through one multimode or singlemode optical fiber. Capable of transmitting signal up to 20km on singlemode fiber and 1km on multimode fiber, it retains excellent video quality. This miniature yet ruggedized unit is ideal for installation in most camera housings or directly plugged into the camera or DVR because of its light weight. Plug-and-Play design ensures ease of installation requiring no electrical or optical adjustments.



## Features

### Video

- ▶ Non-compressed HD-SDI or SD-SDI signal transmission
- ▶ Support SMPTE 259M and 292M standards
- ▶ Support data rate up to 1.485Gbps
- ▶ Support resolution 720p50/60, 1080i50/60, 1080p25/30
- ▶ No video degradation over the maximum operating distance

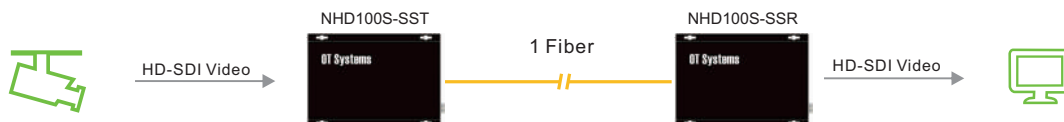
### Optical

- ▶ One fiber design
- ▶ Laser-based optics
- ▶ Multimode or Singlemode
- ▶ ST or FC connectors available

### Robust Design

- ▶ Plug-and-Play design, no in-field adjustments required
- ▶ Miniature size fits within most camera housings
- ▶ BNC connector with short Coax cable for flexible placement in housing or on DVR
- ▶ Operating temperature range of 0°C to +50°C

## Typical Application



## Specifications

### Video

Number of Channels	1
Format	SD-SDI, HD-SDI
Data Rate	1.485Gbps (maximum)
Max Resolution	720p50/60, 1080i50/60, 1080p25/30
I/O Impedance	75 Ohm

### LED

Power	Green / On
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### Connectors

SDI Input / Output	BNC with Coax cable (~10cm)
Optical Input / Output	ST (standard), FC (optional)
Power	DC Jack (3.5 mm)

### Electrical and Mechanical

Power	12VDC @100mA
Dimensions(WxHxD)	82 x 22 x 22mm (PT Coax cable 10cm)
Shipping Weight	0.10kg

### Environmental

Operating Temp	0 °C to +50 °C (Tested -10 °C to +60 °C)
Storage Temp	-20 °C to +60 °C
Relative Humidity	0 to 95% non-condensing
MTBF	> 100,000 hours

## Ordering Information

Fiber Type	Part Number	Description	Wavelengths (nm)	Optical Power Budget (dB)	Max. Distance (Km)
Multi-mode (62.5/125µm)	<b>NHD100S-SMT</b>	Miniature 1 - ch HD-SDI Transmitter with short Coax cable	1310	6	1
	<b>NHD100S-SMR</b>	Miniature 1 - ch HD-SDI Receiver with short Coax cable			
Single-mode (9/125µm)	<b>NHD100S-SST</b>	Miniature 1 - ch HD-SDI Transmitter with short Coax cable	1310	10	20
	<b>NHD110S-SSR</b>	Miniature 1 - ch HD-SDI Receiver with short Coax cable			

Options	<ul style="list-style-type: none"> <li>ST type connector is standard. For FC type, specify "F" in the suffix. E.g. FMT.</li> <li>Please feel free to consult factory if longer transmission distance is required.</li> </ul>
Power Adaptor	<ul style="list-style-type: none"> <li>Power adaptor is included.</li> </ul>

- Notes:
- Transmission distance will suffer if additional losses are introduced by the optical connectors, fusions, splices and the fibers within the network.
  - Operating distance of multimode is limited by the characteristics of the fiber bandwidth.
  - Power adaptor is manufactured by third party and is supplied with fitted screw - terminal output cables.
  - Please feel free to consult factory for any special requirement and customization.



OT Systems Ltd., November 2014

Due to continuous improvement, all product specifications are subject to change without further notice.