

# NHD100Micro3G

Microtype 1-ch 3G-SDI Video



## Description

The advanced NHD100Micro3G series supports optical transmission of non-compressed 3G-SDI, HD-SDI or SD-SDI signal format through one singlemode optical fiber. Capable of transmitting signal up to 20km, it retains excellent video quality. This compact yet ruggedized unit is ideal for installation in most camera housings. Plug-and-Play design ensures ease of installation requiring no electrical or optical adjustments.



## Features

### Video

- ▶ Non-compressed 3G-SDI, HD-SDI or SD-SDI signal transmission
- ▶ Support SMPTE 259M, 292M and 424M standards
- ▶ Support data rate up to 2.970 Gbps
- ▶ Support resolution 720p50/60, 1080i50/60, 1080p25/30, 1080p50/60
- ▶ No video degradation over the maximum operating distance

### Optical

- ▶ One fiber design
- ▶ High performance laser-based optics
- ▶ Singlemode
- ▶ ST or FC connectors available

### Robust Design

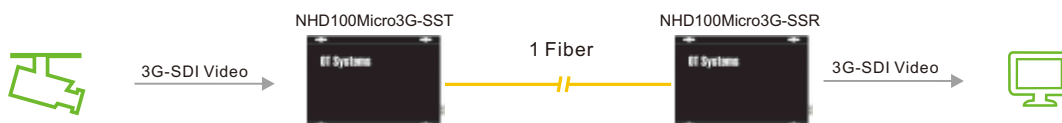
- ▶ Plug-and-Play design, no in-field adjustments required
- ▶ Designed for use in harsh environments
- ▶ Microtype fits within most camera housings
- ▶ Wide operating temperature range of -40°C to +75°C

### Local and remote diagnostics

- ▶ Service-friendly LED status indicators on front of the module

HD-SDI Transmission

## Typical Application



## Specifications

### Video

Number of Channels	1
Format	SD-SDI, HD-SDI, 3G-SDI
Data Rate	2.97Gbps (maximum)
Standard	Support SMPTE 259M, 292M, 424M
Max Resolution	720p50/60, 1080i50/60, 1080p25/30 1080p50/60
I/O Impedance	75 Ohm

### LED

SDI Signal Indication (Presence)	Green / On
Power	Green / On

### Connectors

SDI Input / Output	BNC
Optical Input / Output	ST (standard), FC (optional)
Power	2-pin screw terminal

### Electrical and Mechanical

Power	12VDC @150mA
Dimensions(WxHxD)	36.2 x 24.5 x 101mm(Max)
Shipping Weight	0.15kg

### Environmental

Operating Temp	-40 °C to +75 °C
Storage Temp	-40 °C to +85 °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)
Single-mode (9/125µm)	<b>NHD100Micro3G-SST</b>	Microtype 1 - ch 3G-SDI Transmitter	1310	10	20
	<b>NHD100Micro3G-SSR</b>	Microtype 1 - ch 3G-SDI Receiver			

- Options
- ST type connector is standard. For FC type, specify "F" in the suffix. E.g. FMT.
  - Please feel free to consult factory if longer transmission distance is required.

- Power Adaptor
- Power adaptor is included.

- 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 2013

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