

NHD100Micro

Microtype 1-ch HD-SDI Video



Description

The advanced NHD100Micro 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 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 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
- ▶ High performance laser-based optics
- ▶ Multimode or 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

Warranty

- ▶ Comprehensive Lifetime Warranty

Typical Application



Specifications

Video

Number of Channels	1
Format	SD-SDI, HD-SDI
Data Rate	1.485Gbps (maximum)
Standard	SMPTE 259M, 292M
Max Resolution	720p50/60, 1080i50/60, 1080p25/30
I/O Impedance	75 Ohm
Video Input/Output Level	800mVp-p±10%
Transmission Distance	Over 100m (Belden 1694A)
Jitter	Around 0.2 UI

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

HD-SDI Transmission

Ordering Information

Fiber Type	Part Number	Description	Wavelengths (nm)	Optical Power Budget (dB)	Max. Distance (Km)
Multi-mode (62.5/125µm)	NHD100Micro-SMT	Microtype 1 - ch HD-SDI Transmitter	1310	9	1
	NHD100Micro-SMR	Microtype 1 - ch HD-SDI Receiver			
Single-mode (9/125µm)	NHD100Micro-SST	Microtype 1 - ch HD-SDI Transmitter	1310	12	20
	NHD100Micro-SSR	Microtype 1 - ch HD-SDI Receiver			

Options	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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.