

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 |

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.



OT Systems Ltd., July 2012

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