



FIBER OPTIC LINK


- 4K-SDI / 3G-SDI / HD-SDI / EX-SDI -




Full HD, SDI
(1920x1080, 60fps)




Full HD, SDI
(1920x1080, 60fps)



Full HD, SDI
(1920x1080, 60fps)



Full HD, SDI
(1920x1080, 60fps)



Full HD, SDI
(1920x1080, 60fps)

DK SOLUTIONS

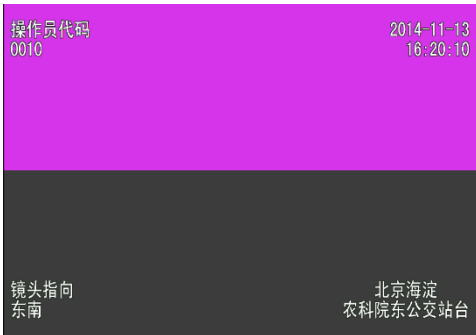
www.gogocctv.com/fiber.htm

WDM Technology, 16Channel SDI + Multi Function over single fiber



PROOTEK SDI Optical Transmission technical features

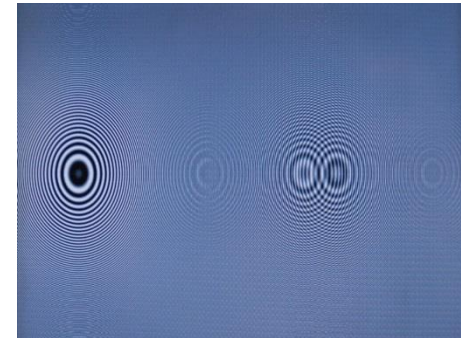
- Support Multi rate SDI (SD/HD/3G SDI) video and VC-2, EX-SDI,4K EX-SDI, TDM
- Non compression, no secondary coding.
- Multiple channel optical transmission using WDM technology.
- Pass CHECKFIELD pathological coding detection and CIRCLE signal detection.



CHECKFIELD



YRamp

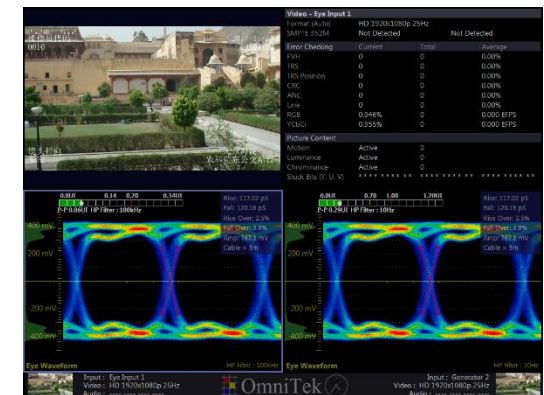


CIRCLE

- A variety of chassis and installation : Independent type and Frame type.

SDI Signal Performance

Amplitude	800mVp-p \pm 10%
Overshoot	10% Amplitude
Video format	SD-SDI、 HD-SDI、 3G-SDI(Optional : SFP)
Signal standard	SMPTE 259M/292M/424M/DVB-ASI
Video rate	143M、 177M、 270M、 360M、 540M、 1485M、 2970M SD 525i/625i
Video resolution	HD 720p 24, 25/30, 50/60 HD 1080i 50/60 HD 1080p 24, 25/30, 50/60
Video coding	8bit , 10bit , 12bit Auto
Return loss	\leq -15 dB @ 5MHz ~ 1.5GHz
Retiming	Auto Retiming, Auto identify rating
Coupled modes	Ac coupling
Equalization	Auto Equalization
Rise/fall time	\geq 0.4ns , \leq 1.50ns@270Mbps , Difference less than 0.5ns \leq 270ps@1.485Gbps , Difference less than 100ps \leq 135ps@2.97Gbps , Difference less than 50ps
Alignment Jitter (100KHz)	\leq 0.2UI @270Mbps , at 1KHz \leq 0.2UI @1.485Gbps , at 100KHz \leq 0.3UI @2.97Gbps , at 100KHz \leq 0.2UI @270Mbps
Timing Jitter(10Hz)	\leq 1.0UI @1.485Gbps \leq 2.0UI @2.97Gbps
Auto Equalization (1694A Standard cable)	> 400M/SD SDI ; > 200M/HD SDI ; > 100M/3G SDI ;
Embedded audio	Support, stereo Analog audio or AES/EBU digital audio



Inside of Fiber Optic Transmitter

SDI Module(Mini)



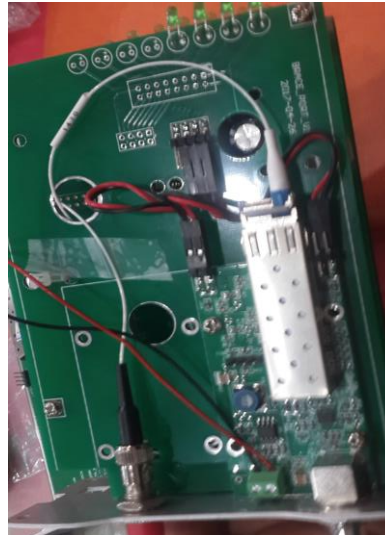
SDI Module(Basic)



Multi Function Module



SDI Module(CG Out)



SDI Module(Basic)

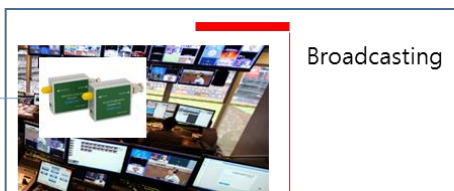


Multi Function Module

3G/HD-SDI Fiber Optic Link

Multi rate SDI Transmission (3G/HD/SD-SDI, EX-SDI, 4K EX-SDI, VC-2)
Single mode or Multi Mode Selection

Max. 20KM(SMF)



Broadcasting



ITS/Traffic/
Railway



Security
Surveillance

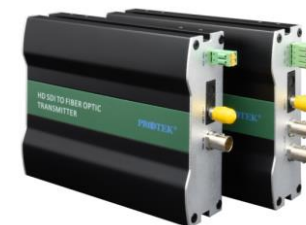


Government
Remote
Monitoring

POT-S01HDM-10KM-TX/RX
1Ch. Mini 3G/HD-SDI Optic Link



POT-S01HD-20KM-Tx/Rx
1 Ch. 3G/HD-SDI Optic Link,
RS-485, Dual Output at receiver



POT-S01HDS-20KM-TX/RX
1 Ch. Small, 3G/HD-SDI Optic Link,
RS-485



POT-S01HD-20KM-Tx/Rx-CG
1 Ch. 3G/HD-SDI Optic Link, Built
in Character generator at receiver,
RS-485

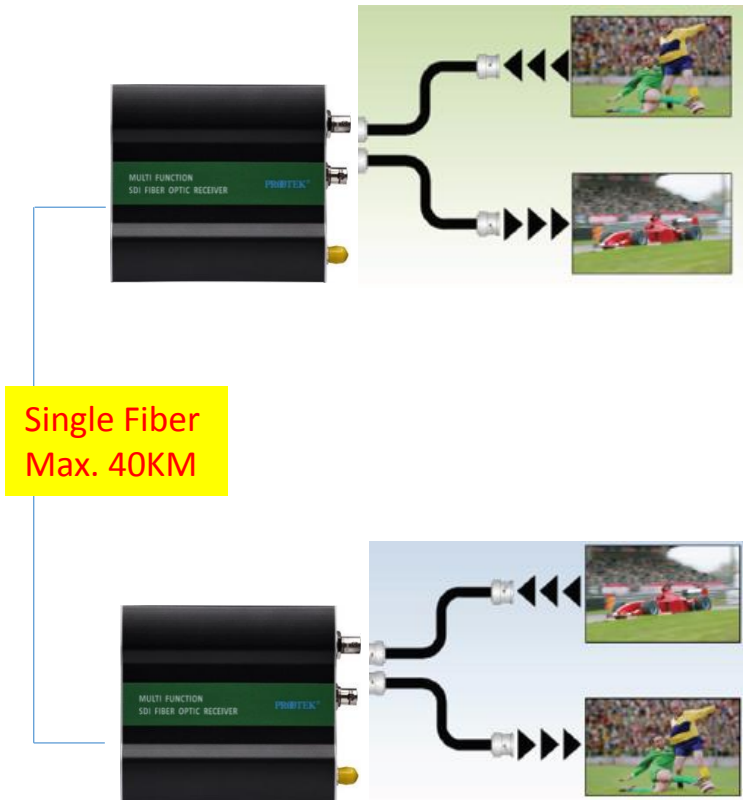


Bidirectional 3G/HD-SDI Fiber Optic Link, WDM

Multi rate SDI Transmission (3G/HD/SD-SDI, EX-SDI, 4K EX-SDI, VC-2)

Configure Unidirectional or Bidirectional Video transmission

Multi Function Signal (TCP/IP, RS-Data, Audio, Alarm, Analog Video) Transmission



POT-S02HD-20KM-TX/RX
2Ch. 3G/HD-SDI Fiber Optic Link



POT-S02AHD-20KM-TX/RX-VD
2Ch. 3G/HD-SDI & Multi Function
Fiber Optic Link



POT-S01AHD-20KM-TX/RX-VD
1 Ch. 3G/HD-SDI & Multi Function
Fiber optic link

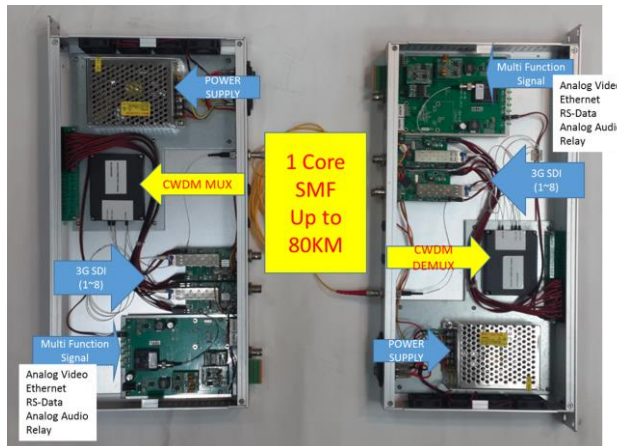
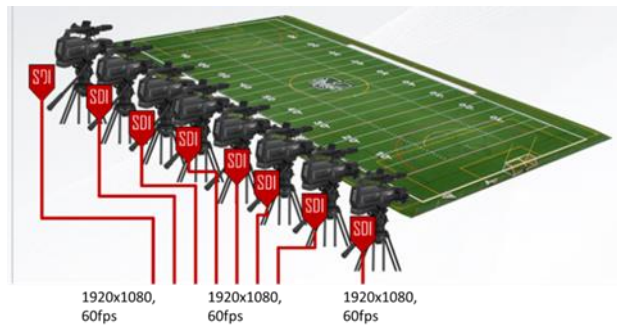


POT-S01A-40KM-TX/RX-VD
Multi Function Fiber Optic Link



Multi Channels 3G/HD-SDI Fiber Optic Link, WDM

Independent SDI Channel (Bidirectional Configuration for any channels)
SDI Signal(3G/HD/SD-SDI, EX-SDI, 4K EX-SDI, VC-2) transmission for any channel
4K SDI (4 x 3G-SDI) and Return 4K SDI (4 x 3G-SDI)
Lowering the cost of digital video distribution and simplifying your cable plant



POT-S04HD-40KM-TX/RX
4Ch. 3G/HD-SDI Fiber Optic Link



POT-S04AHD-40KM-TX/RX-VD
4 Ch. 3G/HD-SDI & Multi Function Fiber Optic Link



POT-S08HD-40KM-TX/RX
8Ch. 3G/HD-SDI Fiber Optic Link

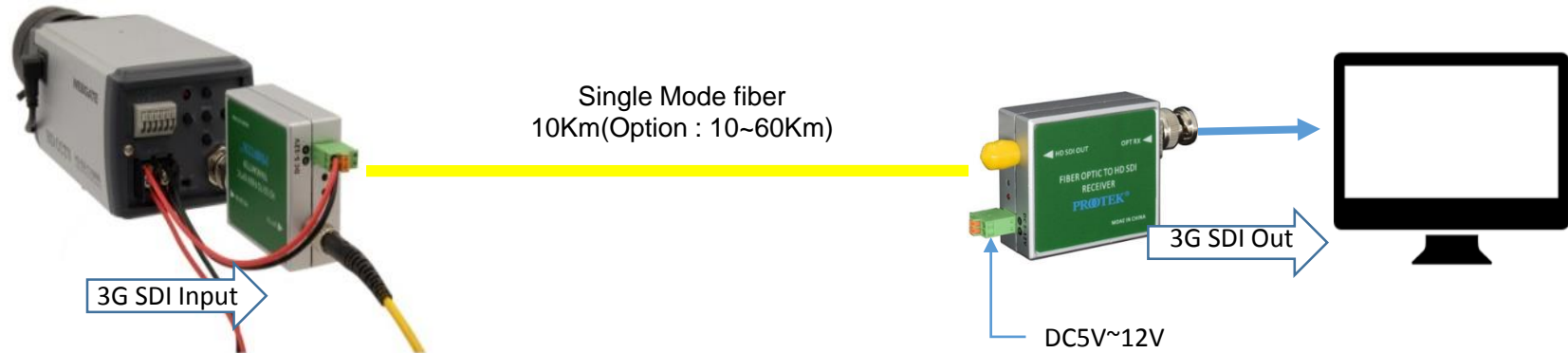


POT-S08AHD-40KM-TX/RX-VD
8Ch. 3G/HD-SDI & Multi Function Fiber Optic Link



HD-SDI to Fiber Optic Transceiver

POT-S01HDM-10KM-Tx/Rx



- Real time, uncompressed Multi-rate SD/HD/3G video transmission
- Support EX-SDI,4K EX-SDI, TDM
- Supports SDI video inputs up to 3Gbit/s(1080p60 : Option)
- Auto re-clocking 143M/177M/270M/360M/540M/ 1485M/2970Mbps(Option)
- Error free pathological pattern performance
- Compact Size(49X55X22mm)
- ST fiber connections
- Up to 10km @ 3Gbit/s(Single mode)
- Support embedded audio and meta data



Multi Mode

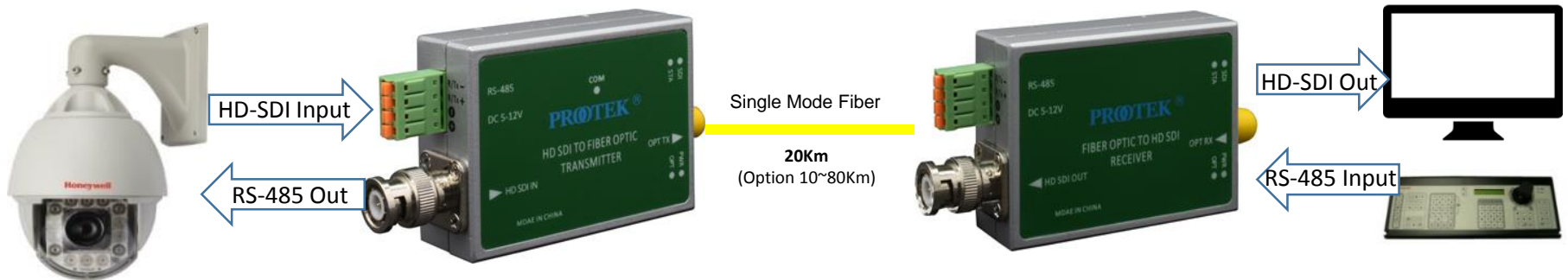
POT-S01HDM-10KM-Tx/Rx

Model	POT-S01-HDM-10KM-Tx/Rx
HD-SDI	
Video Input	1 BNC, 75Ω unbalanced
Video Output	1 BNC, 75Ω unbalanced
Signal Level	800mVp-p ±10%
Overshoot	10%
Video Format	SD-SDI, HD-SDI, 3G-SDI(Option)
Multi-format Rate	SMPTE-259M/292M/424M/DVD-ASI
Data Rate	143M, 177M, 270M, 360M, 540M, 1485M, 2970M
Video Format	SD 525i/625i HD 720p24, 25/30, 50/60 HD 1080i, 50/60 HD 1080p24, 25/30, 50/60
Video Coding	8bit, 10bit, 12bit Auto
Return Loss	≤ -15dB @ 5MHz ~ 1.5GHz
Retiming	Auto
Balance mode	Auto
Coupling Mode	AC Coupling
Rise/Fall time	≥0.4ns, ≤ 1.50ns@270MBPS, Difference less than 0.5ns
	≤ 270ps @1.485Gbps, Difference less than 100ps
	≤ 135ps @2.97Gbps, Differeace less than 50ps
Alignment Jitter(100KHz)	≤ 0.2UI@270Mbps, at 1KHz ≤ 0.1UI@1.485Gbps, at 100KHz ≤ 0.3UI@2.97Gbps, at 100KHz
Timing Jitter(10Hz)	≤ 0.2UI@270Mbps ≤ 1.0UI@1.485Gbps ≤ 2.0UI@2.97Gbps
Equalization(1694A)	>400m , SD-SDI / >200m, HD-SDI, >100m 3G-SDI
Embaded Audio	Support(Streo Analog audio or AES/EBU digital audio)

Optic	
No. of fiber	1
Optic Connector	ST/PC
Wave Length	1310/1550nm
Distance	10Km(Option : 20~60Km)
Operating Temperature	-40°C ~ 75°C
Power	5~12VDC±10%, Max 4W
Case Size	49x55x22mm
Status Indicator	Power, SDI
MTBF	100,000Hr

HD-SDI to Fiber Optic Transceiver with Return RS485

POT-S01HDS-20KM-Tx/Rx



- Real time, uncompressed Multi-rate SD/HD/3G video transmission
- Support EX-SDI,4K EX-SDI, TDM
- Supports SDI video inputs up to 3Gbit/s(1080p60 : Option)
- Auto equalization and reclocking 143M/177M/270M/360M/540M/ 1485M/2970Mbps(Option)
- Error free pathological pattern performance
- RS-485
- ST/PC or FC/PC or SC/PC fiber connections
- LED Indicator
- Up to 20km @ 3Gbit/s(Single mode)



LC Type Connector

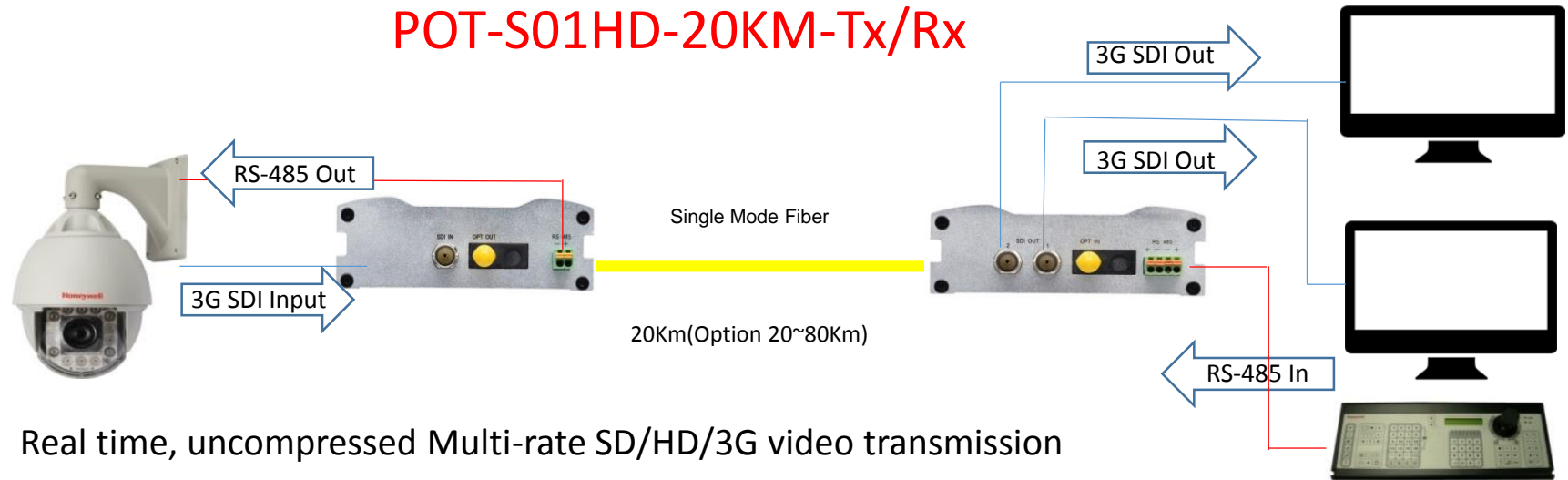
POT-S01HDS-20KM-Tx/Rx

Model	POT-S01HDS-20KM-Tx/Rx
HD-SDI	
Video Input	1 BNC, 75Ω unbalanced
Video Output	1 BNC, 75Ω unbalanced
Signal Level	800mVp-p ±10%
Overshoot	10%
Video Format	SD-SDI, HD-SDI, 3G-SDI(Optional)
Multi-format Rate	SMPTE-259M/292M/424M/DVD-ASI
Data Rate	143M, 177M, 270M, 360M, 540M, 1485M, 2970M
Video Format	SD 525i/625i HD 720p24, 25/30, 50/60 HD 1080i, 50/60 HD 1080p24, 25/30, 50/60
Video Coding	8bit, 10bit, 12bit Auto
Return Loss	≤ -15dB @ 5MHz ~ 1.5GHz
Retiming	Auto
Balance mode	Auto
Coupling Mode	AC Coupling
Rise/Fall time	≥0.4ns, ≤ 1.50ns@270MBPS, Difference less than 0.5ns ≤ 270ps @1.485Gbps, Difference less than 100ps ≤ 135ps @2.97Gbps, Difference less than 50ps
Alignment Jitter(100KHz)	≤ 0.2UI@270Mbps, at 1KHz ≤ 0.1UI@1.485Gbps, at 100KHz ≤ 0.3UI@2.97Gbps, at 100KHz
Timing Jitter(10Hz)	≤ 0.2UI@270Mbps ≤ 1.0UI@1.485Gbps ≤ 2.0UI@2.97Gbps
Equalization(1694A)	>400m , SD-SDI / >200m, HD-SDI, >100m 3G-SDI
Embaded Audio	Support(Stereo Analog audio or AES/EBU digital audio)

Model	POT-S01HDS-20KM-Tx/Rx
Data	
Data port	RS-485
Data Rate	Manchester, Bi-phase
Data Format	RS-485:DC~500kbps
Working mode	half duplex o
Signal Level	0.4Vp-p ~ 3.4Vp-p
Bit Error Rate	< 10 ⁻⁹
Optic	
No. of fiber	1
Optic Connector	ST/PC or FC/PC
Wave Length	1310/1550nm
Distance	20Km(Option : 20~60Km)
Operating Temperature	-40°C ~ 75°C
Power	5V~12VDC±10%, Max4W
Case Size	54x76x25mm
Status Indicator	Power, SDI, Data, Optical Link, Error
MTBF	100,000Hr

3Gbit SDI to Fiber Optic Transceiver

POT-S01HD-20KM-Tx/Rx



- Real time, uncompressed Multi-rate SD/HD/3G video transmission
- Support EX-SDI,4K EX-SDI, TDM
- Supports SDI video inputs up to 3Gbit/s(1080p60)
- Auto equalization & reclocking 143M/177M/270M/360M/540M/ 1.5Gbit / 2.97Gbit
- Error free optical transmission
- RS-485(Option : RS-232)
- 2x SDI outputs at receiver
- ST/PC or FC/PC fiber connections
- Up to 20km @ 3Gbit/s(Single mode)
- SNMP Protocol Support



POT-S01HD-20KM-Tx/Rx

Model	POT-S01HD-20KM-Tx/Rx
HD-SDI	
Video Input	1 BNC, 75Ω unbalanced
Video Output	2 BNC, 75Ω unbalanced
Signal Level	800mVp-p ±10%
Overshoot	10%
Video Format	SD-SDI, HD-SDI, 3G-SDI(Optional)
Multi-format Rate	SMPTE-259M/292M/424M/DVD-ASI
Data Rate	143M, 177M, 270M, 360M, 540M, 1485M, 2970M
Video Format	SD 525i/625i HD 720p24, 25/30, 50/60 HD 1080i, 50/60 HD 1080p24, 25/30, 50/60
Video Coding	8bit, 10bit, 12bit Auto
Return Loss	≤ -15dB @ 5MHz ~ 1.5GHz
Retiming	Auto
Balance mode	Auto
Coupling Mode	AC Coupling
Rise/Fall time	≥0.4ns, ≤ 1.50ns@270MBPS, Difference less than 0.5ns ≤ 270ps @1.485Gbps, Difference less than 100ps ≤ 135ps @2.97Gbps, Difference less than 50ps
Alignment Jitter(100KHz)	≤ 0.2UI@270Mbps, at 1KHz ≤ 0.1UI@1.485Gbps, at 100KHz ≤ 0.3UI@2.97Gbps, at 100KHz
Timing Jitter(10Hz)	≤ 0.2UI@270Mbps ≤ 1.0UI@1.485Gbps ≤ 2.0UI@2.97Gbps
Equalization(1694A)	>400m , SD-SDI / >200m, HD-SDI, >100m 3G-SDI
Embaded Audio	Support(Stereo Analog audio or AES/EBU digital audio)

Model	POT-S01HD-20KM-Tx/Rx
Data	
Data port	RS-485
Data Rate	Manchester, Bi-phase
Data Format	RS-485:DC~500kbps
Working mode	half duplex o
Signal Level	0.25Vp-p ~ 10Vp-p
Bit Error Rate	< 10 ⁻⁹
Network Management	SNMP Support
Optic	
No. of fiber	1
Optic Connector	ST/PC or FC/PC
Wave Length	1310/1550nm, WDM
Distance	20Km(Option : 10~80Km)
Operating Temperature	-40°C ~ 75°C
Power	12VDC±10%, Max6W
Case Size	112x144x38mm
Status Indicator	Power, SDI, Data, Optical Link, Error
MTBF	100,000Hr

DIMENSIONS

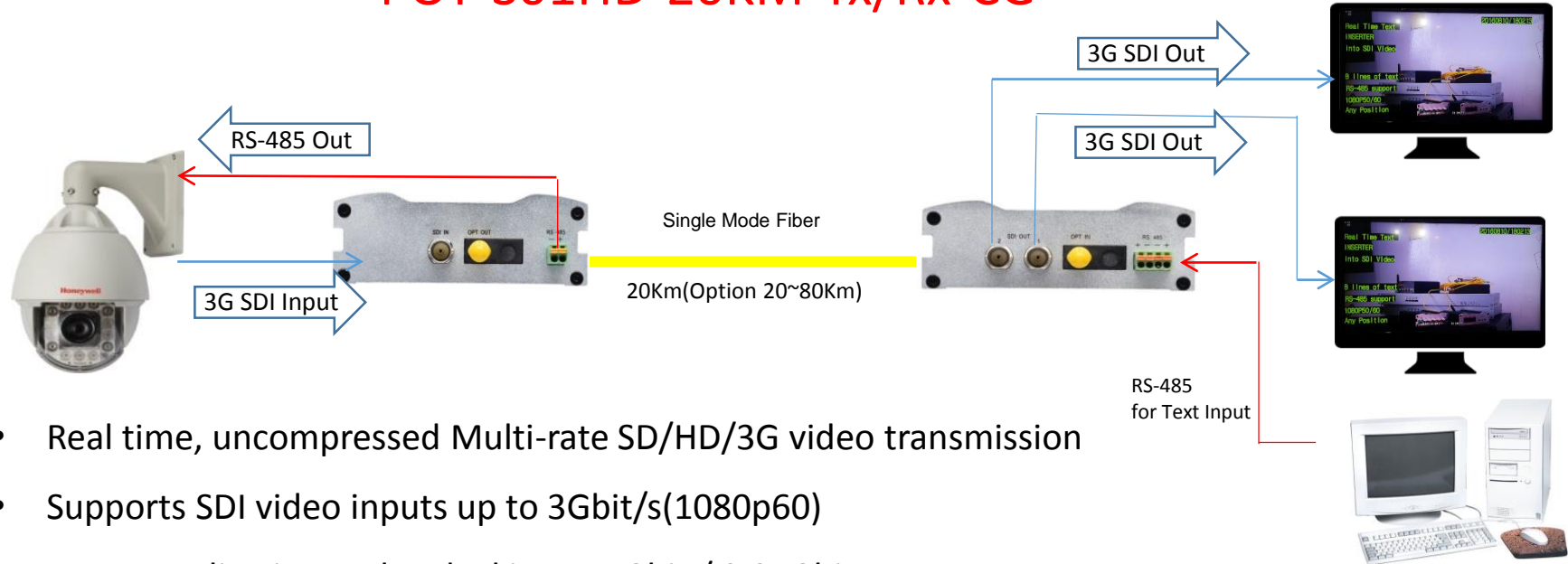
POT-S01HD-20KM-Tx/Rx

Unit : mm



3Gbit SDI to Fiber Optic Transceiver

POT-S01HD-20KM-Tx/Rx-CG



- Real time, uncompressed Multi-rate SD/HD/3G video transmission
- Supports SDI video inputs up to 3Gbit/s(1080p60)
- Auto equalization and reclocking 1.5Gbit / 2.97Gbit
- Error free optical transmission
- 2x SDI outputs
- **Built-in character generator**
- ST/PC or FC/PC fiber connections
- SNMP Protocol Support
- Up to 20km @ 3Gbit/s(Single mode)



POT-S01HD-20KM-Tx/Rx-CG

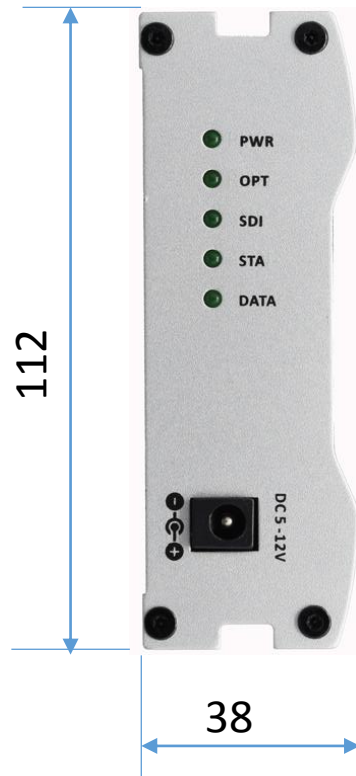
Model	POT-S01HD-20KM-Tx/Rx-CG
HD-SDI	
Video Input	1 BNC, 75Ω unbalanced
Video Output	2 BNC, 75Ω unbalanced
Signal Level	800mVp-p ±10%
Overshoot	10%
Video Format	SD-SDI, HD-SDI, 3G-SDI(Optional)
Multi-format Rate	SMPTE-259M/292M/424M/DVD-ASI
Data Rate	143M, 177M, 270M, 360M, 540M, 1485M, 2970M
Video Format	SD 525i/625i HD 720p24, 25/30, 50/60 HD 1080i, 50/60 HD 1080p24, 25/30, 50/60
Video Coding	8bit, 10bit, 12bit Auto
Return Loss	≤ -15dB @ 5MHz ~ 1.5GHz
Retiming	Auto
Balance mode	Auto
Coupling Mode	AC Coupling
Rise/Fall time	≥0.4ns, ≤ 1.50ns@270MBPS, Difference less than 0.5ns ≤ 270ps @1.485Gbps, Difference less than 100ps ≤ 135ps @2.97Gbps, Differeace less than 50ps
Alignment Jitter(100KHz)	≤ 0.2UI@270Mbps, at 1KHz ≤ 0.1UI@1.485Gbps, at 100KHz ≤ 0.3UI@2.97Gbps, at 100KHz
Timing Jitter(10Hz)	≤ 0.2UI@270Mbps ≤ 1.0UI@1.485Gbps ≤ 2.0UI@2.97Gbps
Equalization(1694A)	>400m , SD-SDI / >200m, HD-SDI, >100m 3G-SDI
Embaded Audio	Support(Streo Analog audio or AES/EBU digital audio)

Model	POT-S01HD-20KM-Tx/Rx-CG
Data	
Data port	RS-485
Data Rate	Manchester, Bi-phase
Data Format	RS-485:DC~500kbps
Working mode	Half duplex
Signal Level	0.25Vp-p ~ 10Vp-p
Bit Error Rate	< 10 ⁻⁹
Character Generator	Built-in Character Generator board in RX
Neteork Management	SNMP Support
Optic	
No. of fiber	1
Optic Connector	ST/PC or FC/PC
Wave Length	1310/1350/1550nm, WDM
Distance	40Km(Option : 20~60Km)
Operating Temperature	-40°C ~ 75°C
Power	12VDC±10%, Max8W
Case Size	112x144x38mm
Status Indicator	Power, SDI, Video, Audio, Data, Optical Link
MTBF	100,000Hr
Character Display	4 kinds of HD type sizes(64X64、 48X48、 43X43、 32X32). 8 area division; Each area is a line; every line has 16 characters or 32 English letters. Character position is adjustable. Can choose character color. With/without background is optional. Support connection with auto timing correction generator. High precision time(millisecond) . Support dynamic characters. Can display operators' code(optional). Support remote network changing character and tamper-proof function.

DIMENSIONS

POT-S01HD-20KM-Tx/Rx-CG

Unit : mm



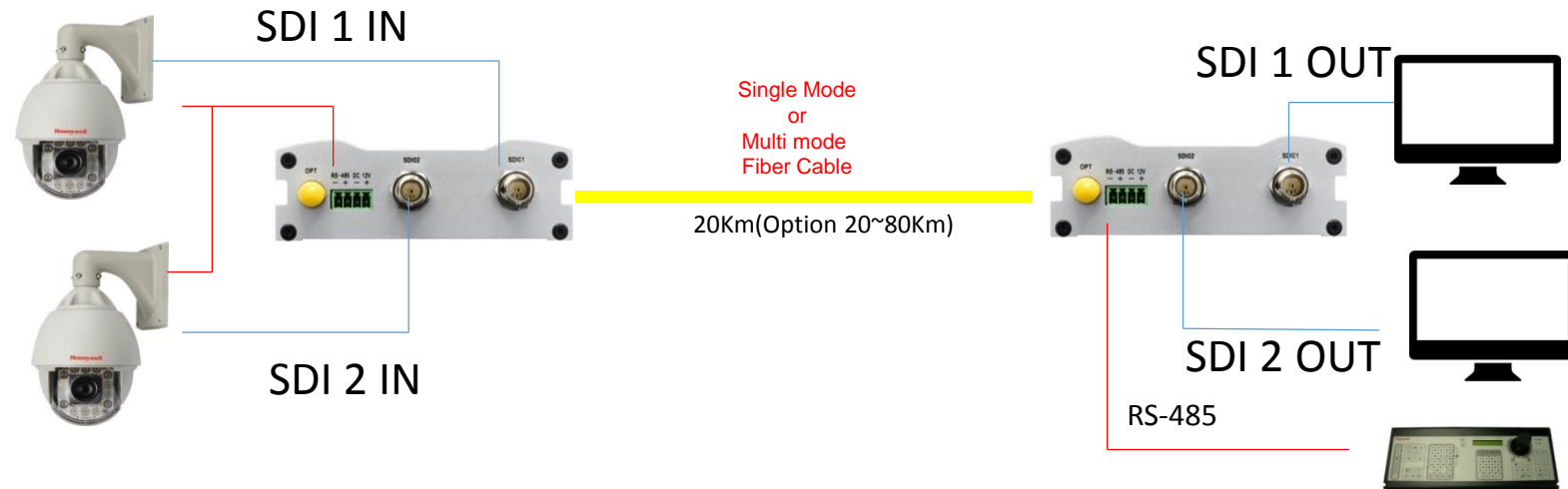
Tx



Rx

Dual Channel 3Gbit SDI to Fiber Transceiver

POT-S02HD-20KM-Tx/Rx



- Dual Channel
- Support SDI video inputs up to 3Gbit/s(1080P60)
- Auto equalization
- Auto reclocking 143M/177M/270M/360M/540M/ 1.5Gbit / 2.97Gbit
- Error Free Optical transmission
- Up to 20km @3Gbit/s
- ST/PC or FC/PC fiber connections
- SNMP Protocol Support



POT-S02HD-20KM-Tx/Rx

Model	POT-S02HD-20KM-Tx/Rx-VD
HD-SDI	
Video Input	2 BNC, 75Ω unbalanced
Video Output	2 BNC, 75Ω unbalanced
Signal Level	800mVp-p ±10%
Overshoot	10%
Video Format	SD-SDI, HD-SDI, 3G-SDI(Optional)
Multi-format Rate	SMPTE-259M/292M/424M/DVD-ASI
Data Rate	143M, 177M, 270M, 360M, 540M, 1485M, 2970M
Video Format	SD 525i/625i HD 720p24, 25/30, 50/60 HD 1080i, 50/60 HD 1080p24, 25/30, 50/60
Video Coding	8bit, 10bit, 12bit Auto
Return Loss	≤ -15dB @ 5MHz ~ 1.5GHz
Retiming	Auto
Balance mode	Auto
Coupling Mode	AC Coupling
Rise/Fall time	≥0.4ns, ≤ 1.50ns@270MBPS, Difference less than 0.5ns ≤ 270ps @1.485Gbps, Difference less than 100ps ≤ 135ps @2.97Gbps, Difference less than 50ps
Alignment Jitter(100KHz)	≤ 0.2UI@270Mbps, at 1KHz ≤ 0.1UI@1.485Gbps, at 100KHz ≤ 0.3UI@2.97Gbps, at 100KHz
Timing Jitter(10Hz)	≤ 0.2UI@270Mbps ≤ 1.0UI@1.485Gbps ≤ 2.0UI@2.97Gbps
Equalization(1694A)	>400m, SD-SDI / >200m, HD-SDI, >100m 3G-SDI
Embaded Audio	Support(Stereo Analog audio or AES/EBU digital audio)

Model	POT-S02HD-20KM-Tx/Rx-VD
Data	
Data port	RS-485
Data Rate	Manchester, Bi-phase
Data Format	RS-485:DC~500kbps
Working mode	Half duplex
Signal Level	0.25Vp-p ~ 10Vp-p
Bit Error Rate	< 10 ⁻⁹
Neteork Management	SNMP Support
Optic	
No. of fiber	1
Optic Connector	ST/PC or FC/PC
Wave Length	1310/1350/1370/1550nm, WDM
Distance	20Km(Option : 20~60Km)
Operating Temperature	-40°C ~ 75°C
Power	12VDC±10%, Max10W
Case Size	112x144x50.8mm
Status Indicator	Power, SDI, Video, Audio, Data, Optical Link
MTBF	100,000Hr

DIMENSIONS

POT-S02HD-20KM-Tx/Rx

Unit : mm



3Gbit Bidirectional SDI/Fiber Transceiver

POT-S02HD-20KM-Tx/Rx-B



- Dual Channel
- Support SDI video inputs up to 3Gbit/s(1080P60)
- Auto equalization
- Auto reclocking 143M/177M/270M/360M/540M/ 1.5Gbit / 2.97Gbit
- Error Free Optical transmission
- Up to 20km @3Gbit/s
- ST/PC or FC/PC fiber connections
- SNMP Protocol Support



POT-S02HD-20KM-Tx/Rx-B

Model	POT-S02HD-20KM-Tx/Rx-VD
HD-SDI	
Video Input	2 BNC, 75Ω unbalanced
Video Output	2 BNC, 75Ω unbalanced
Signal Level	800mVp-p ±10%
Overshoot	10%
Video Format	SD-SDI, HD-SDI, 3G-SDI(Optional)
Multi-format Rate	SMPTE-259M/292M/424M/DVD-ASI
Data Rate	143M, 177M, 270M, 360M, 540M, 1485M, 2970M
Video Format	SD 525i/625i HD 720p24, 25/30, 50/60 HD 1080i, 50/60 HD 1080p24, 25/30, 50/60
Video Coding	8bit, 10bit, 12bit Auto
Return Loss	≤ -15dB @ 5MHz ~ 1.5GHz
Retiming	Auto
Balance mode	Auto
Coupling Mode	AC Coupling
Rise/Fall time	≥0.4ns, ≤ 1.50ns@270MBPS, Difference less than 0.5ns ≤ 270ps @1.485Gbps, Difference less than 100ps ≤ 135ps @2.97Gbps, Difference less than 50ps
Alignment Jitter(100KHz)	≤ 0.2UI@270Mbps, at 1KHz ≤ 0.1UI@1.485Gbps, at 100KHz ≤ 0.3UI@2.97Gbps, at 100KHz
Timing Jitter(10Hz)	≤ 0.2UI@270Mbps ≤ 1.0UI@1.485Gbps ≤ 2.0UI@2.97Gbps
Equalization(1694A)	>400m , SD-SDI / >200m, HD-SDI, >100m 3G-SDI
Embaded Audio	Support(Stereo Analog audio or AES/EBU digital audio)

Model	POT-S02HD-20KM-Tx/Rx-VD
Data	
Data port	RS-485
Data Rate	Manchester, Bi-phase
Data Format	RS-485:DC~500kbps
Working mode	Half duplex
Signal Level	0.25Vp-p ~ 10Vp-p
Bit Error Rate	< 10 ⁻⁹
Neteork Management	SNMP Support
Optic	
No. of fiber	1
Optic Connector	ST/PC or FC/PC
Wave Length	1310/1350/1370/1550nm, WDM
Distance	20Km(Option : 20~60Km)
Operating Temperature	-40°C ~ 75°C
Power	12VDC±10%, Max 8W
Case Size	112x144x50.8mm
Status Indicator	Power, SDI, Video, Audio, Data, Optical Link
MTBF	100,000Hr

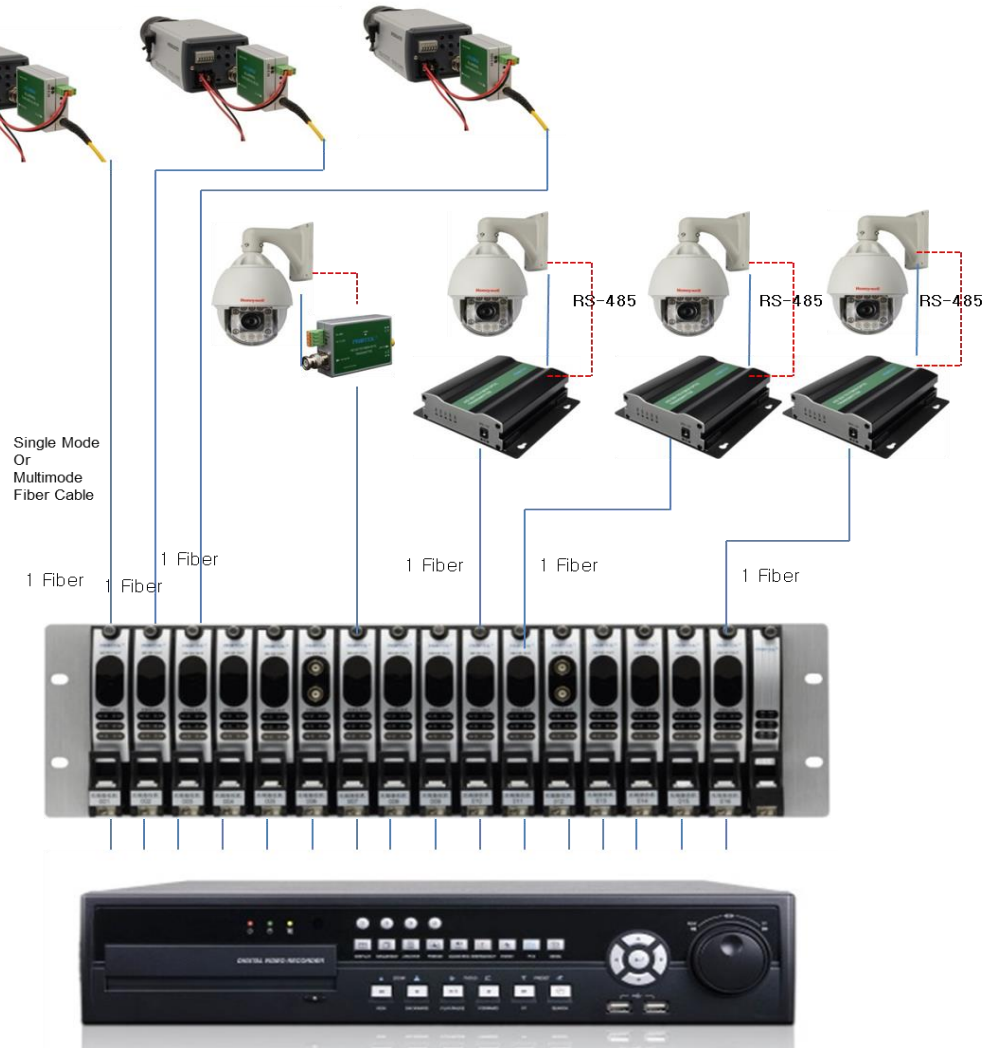
DIMENSIONS

POT-S02HD-20KM-Tx/Rx-B

Unit : mm



3RU, 19-Inch Rack Mount Frame



- 3RU Design
- 84TE
- Up to 16 Slots for 5TE plate
- External 12V DC Power
- Option : Plane Plate



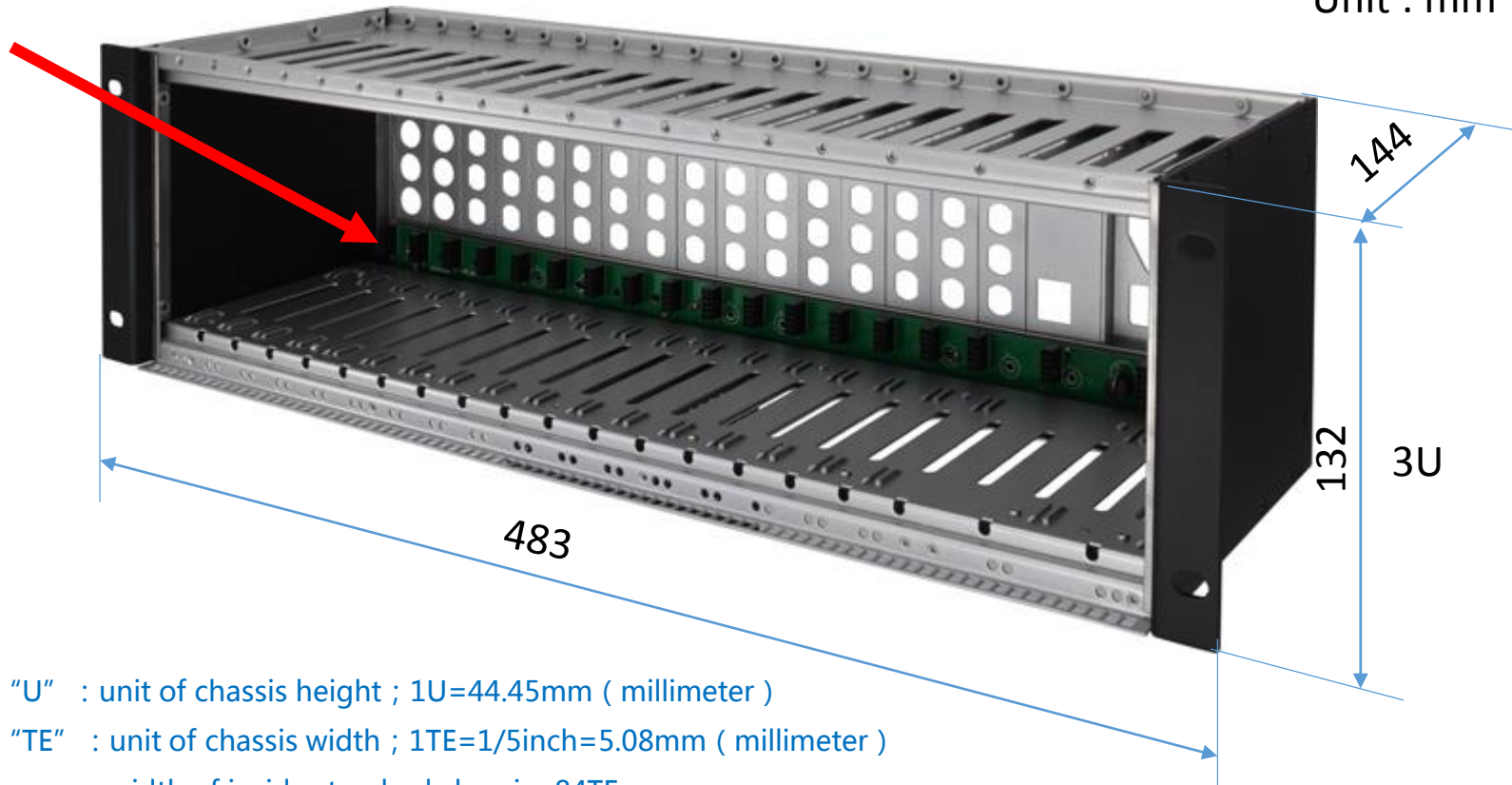
- 3RU Design
- 84TE
- For Character Generator
- Built-in Network Board
- Up to 16 Slots for 4TE plate
- Dual 12V DC Power
- Option : Plane Plate

3RU, 19-Inch Rack Mount Frame

DIMENSIONS

POWER + RS-Data

Unit : mm



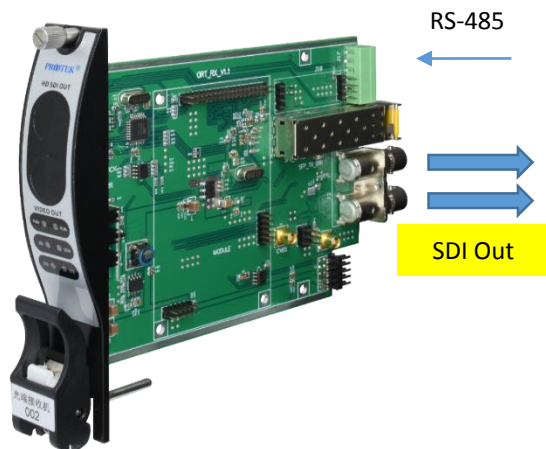
"U" : unit of chassis height ; 1U=44.45mm (millimeter)

"TE" : unit of chassis width ; 1TE=1/5inch=5.08mm (millimeter)

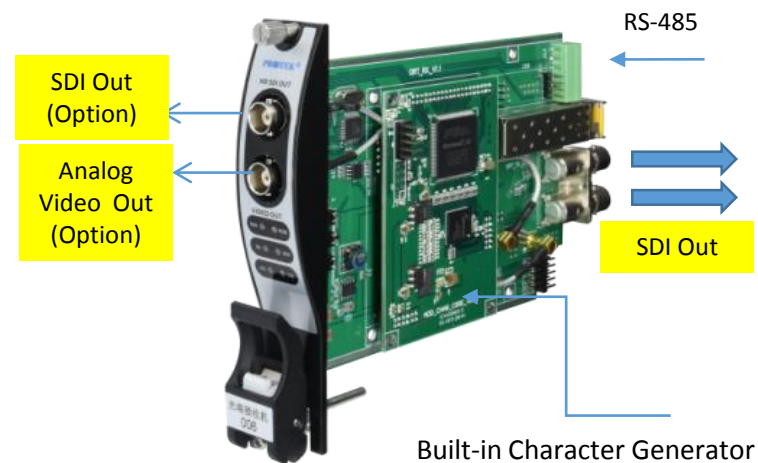
width of inside standard chassis=84TE ;

3G/HD-SDI Fiber Optic Receiver

POT-R01HD-20KM-Rx



POT-R01HD-20KM-Rx-CG



- Supports SDI video inputs up to 3Gbit/s(1080p60)
- Auto equalization & reclocking 143M/177M/270M/360M/540M/ 1.5Gbit / 2.97Gbit
- Error free optical transmission
- RS-485
- 2x SDI outputs at receiver
- ST/PC or FC/PC fiber connections
- Up to 20km @ 3Gbit/s(Single mode)
- SNMP Protocol Support

Curved panel

Plane panel

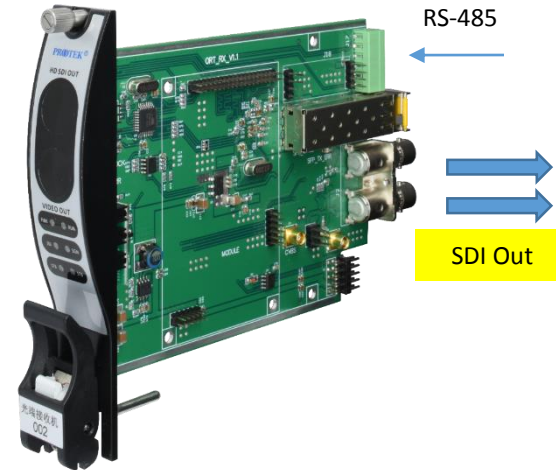


3G/HD-SDI Fiber Optic Transmitter

POT-S01HDM-20KM-Tx



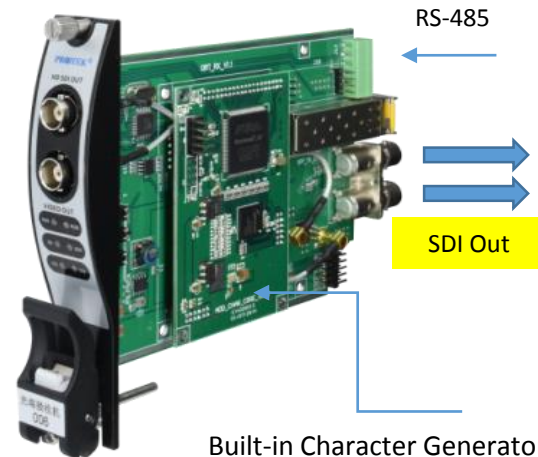
POT-R01HD-20KM-Rx



POT-S01HD-20KM-Tx



POT-R01HD-20KM-Rx-CG



Built-in Character Generator

1 3G/HD-SDI + Multi Function Signal Transmission Over single fiber, WDM

POT-S01AHD-20KM-Tx/Rx-VD

SDI Module

- 1Ch. Uncompressed HD Video signals up to 1080P60
- Support EX-SDI,4K EX-SDI, TDM
- Multi-rate automatic cable equalization
- Max data rate – Up to 3Gbps
- Near Zero latency video
- Error Free pathological pattern operation



Multi-Function Module

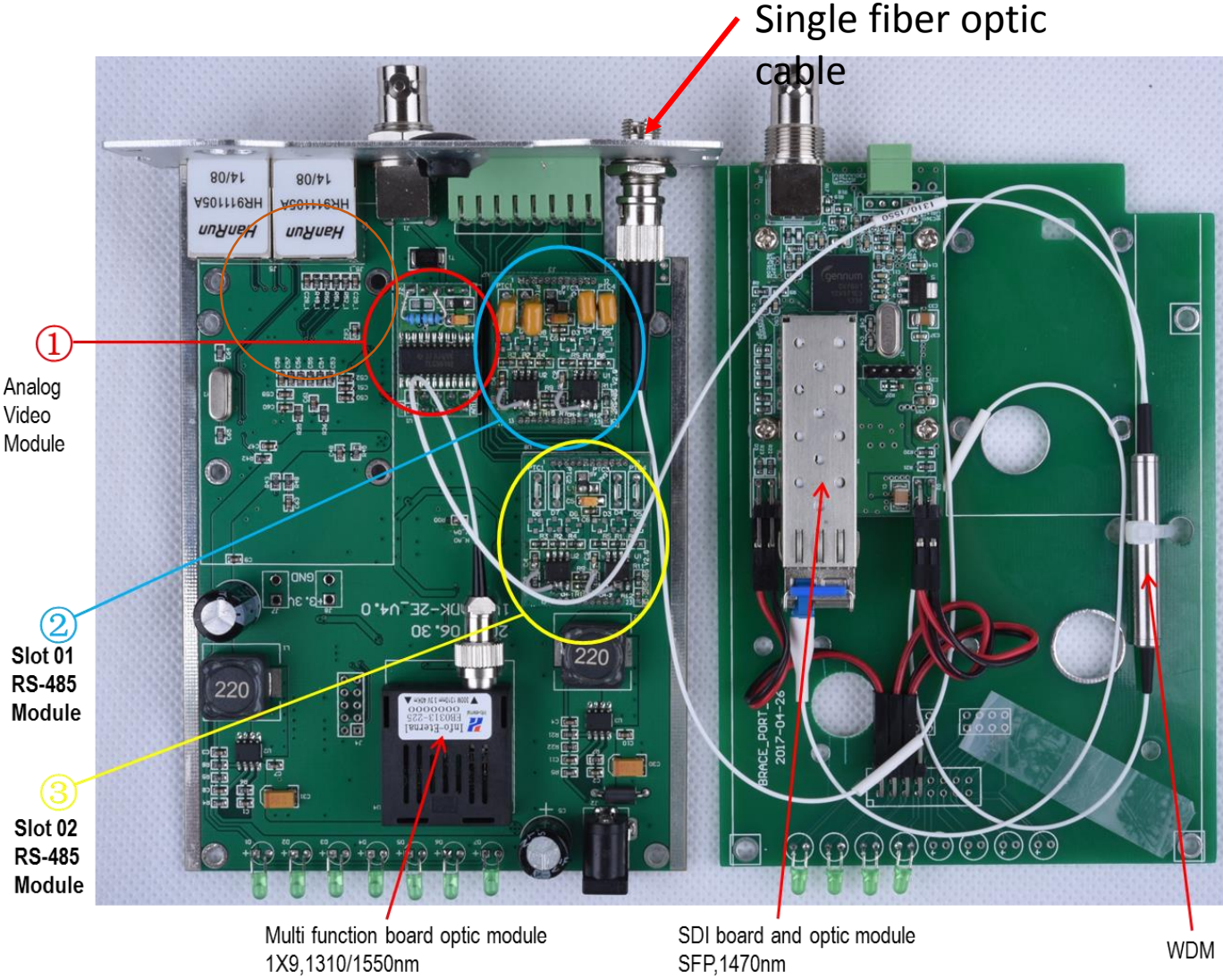
- 1 Analog Video (NTSC/PAL/SECOM)
- 2 IP Ethernet(10/100Mbps)
- Option(Select 2) :
 - + 2 Duplex Audio
 - + 2 Duplex Data (RS-232, RS-485/422)
 - + 2 Contact Closure (5VDC, Relay)



SMF or MMF are available

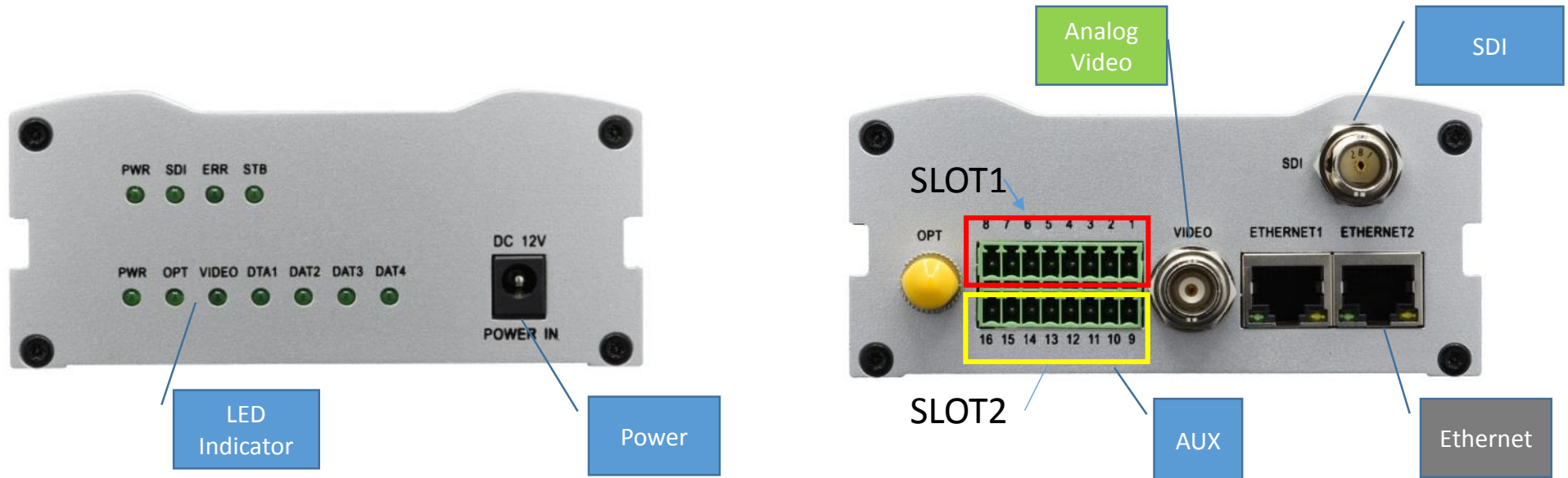
1 3G/HD-SDI + Multi Function Signal Transmission Over single fiber, WDM

POT-S01AHD-20KM-Tx/Rx-VD



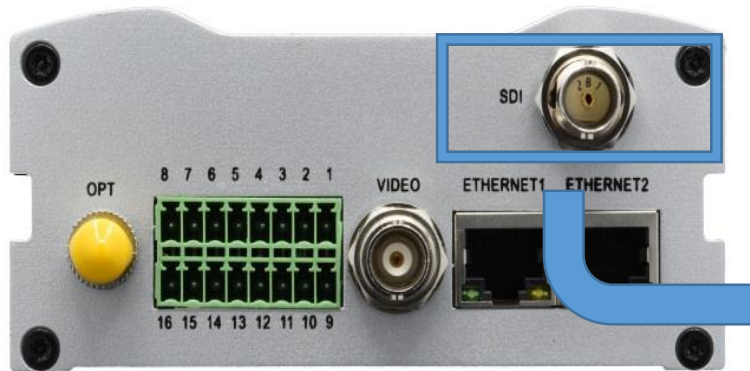
3G SDI, Analog, Ethernet, RS-Data & Audio to Fiber Transceiver(WDM)

POT-S01AHD-20KM-Tx/Rx-VD

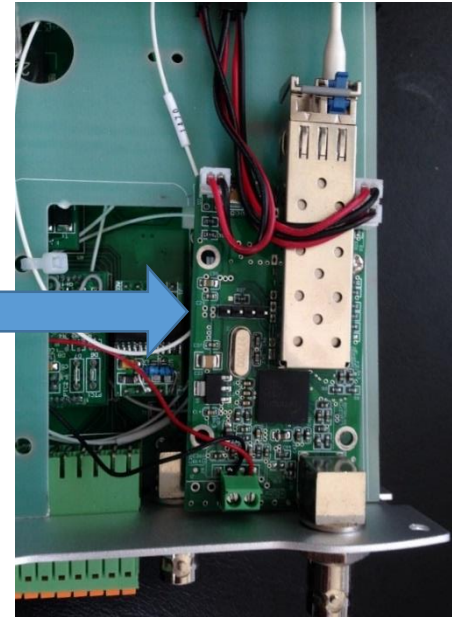


Multi Function Fiber Optic Transmitter

POT-S01AHD-20KM-Tx/Rx-VD



LED Indicator for SDI signal



SDI Video

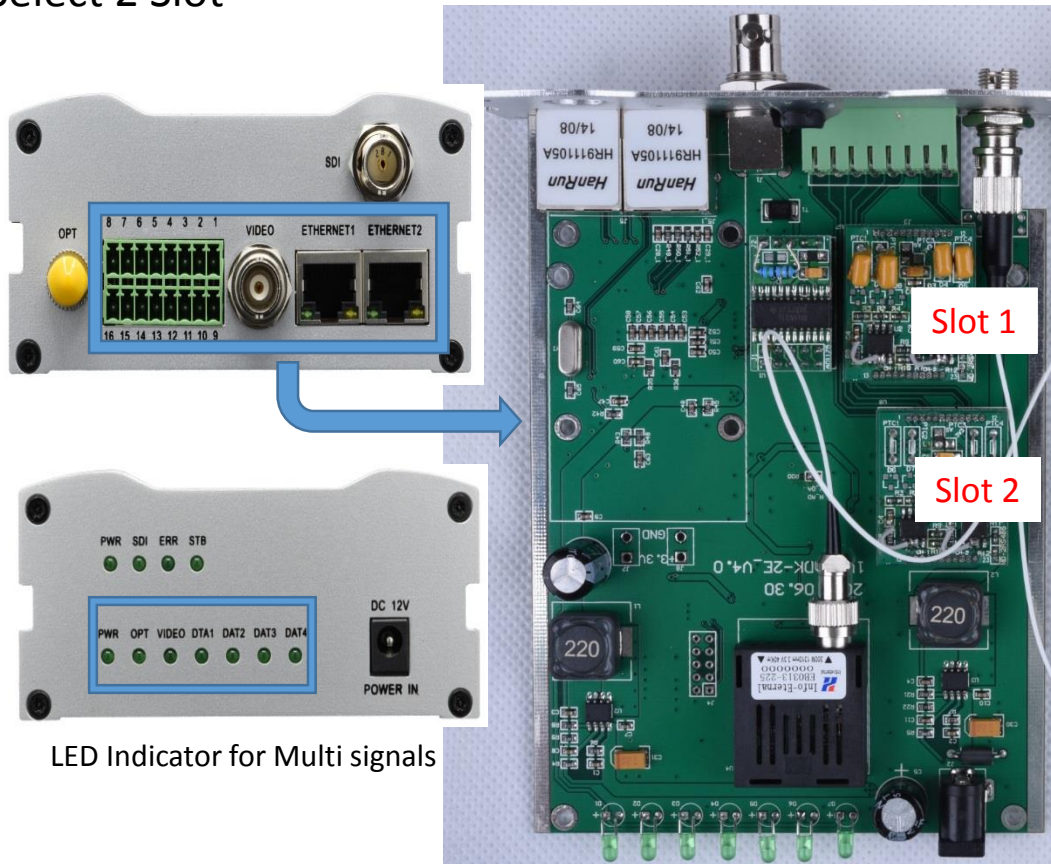
- 3G-SDI
- HD-SDI
- SD-SDI
- 4K EX-SDI
- EX-SDI
- VC2

**SMPTE-259M/292M/424M/DVD-ASI
SD 525i/625i
HD 720p24, 25/30, 50/60
HD 1080i, 50/60
HD 1080p24, 25/30, 50/60
Equalization, Re-clocking
Impedance : BNC, 75Ω unbalanced**

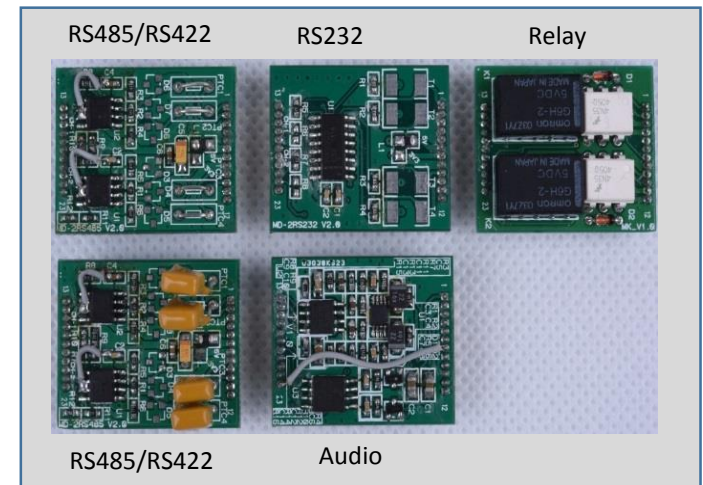
Multi Function Fiber Optic Transmitter

POT-S01AHD-20KM-Tx/Rx-VD

- 2 RJ45 Ethernet(10/100 Ethernet)
- 1 Analog Video (CVBS)
- Select 2 Slot



LED Indicator for Multi signals

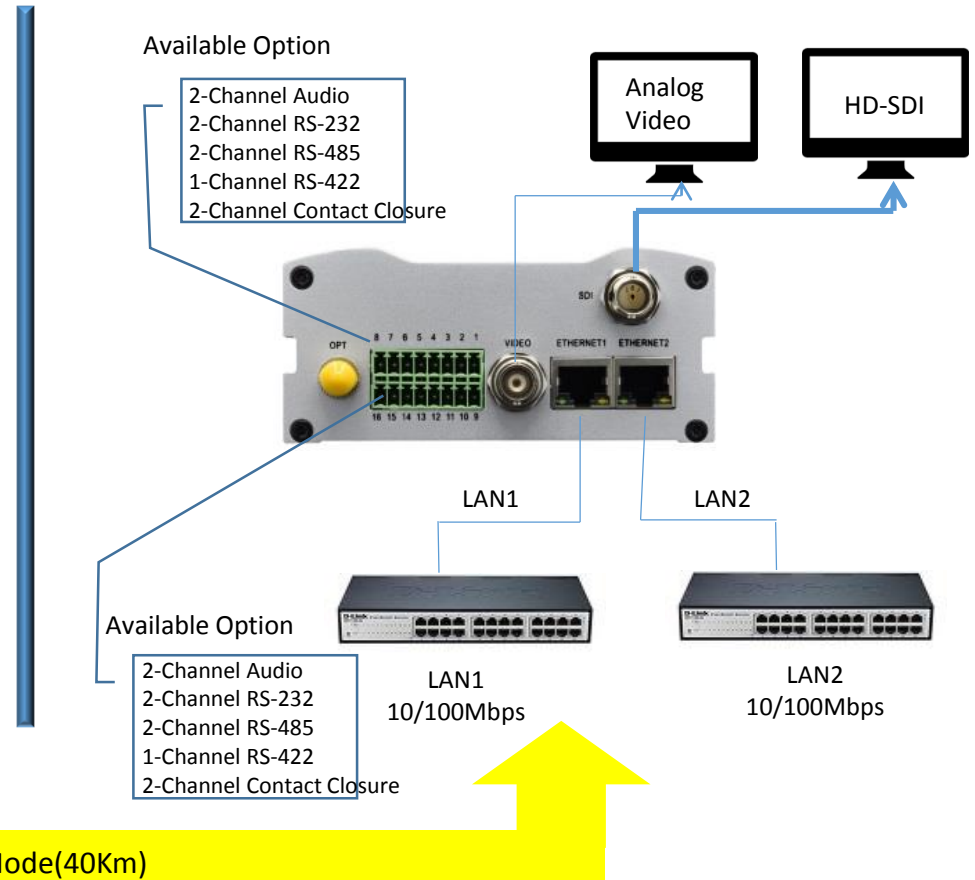
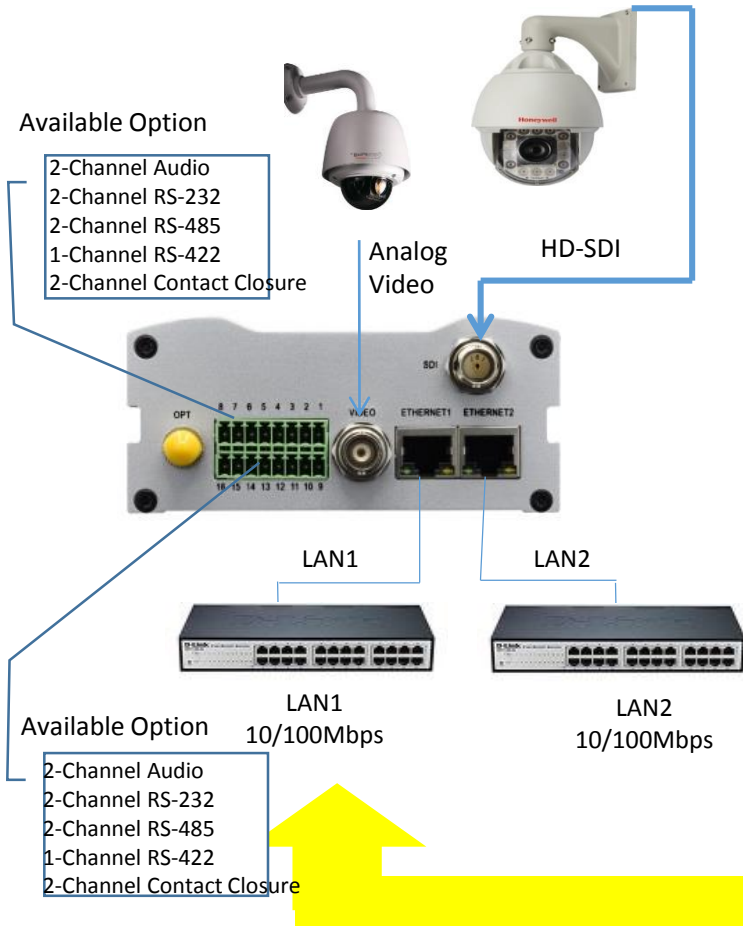


Analog Audio	2-Ch, duplex Analog Audio 2Vp-p/1.5Vp-p Input / Output
RS-232	2-Ch, Simplex, half duplex or full duplex
RS-485	2-Ch, Simplex, half duplex or full duplex
RS-422	1-Ch, Simplex, half duplex or full duplex
Alarm	2Groups, Relay 5VDC

3G SDI, Analog, Ethernet, RS-Data & Audio to Fiber Transceiver(WDM)

POT-S01AHD-20KM-Tx-VD

POT-S01AHD-20KM-Rx-VD

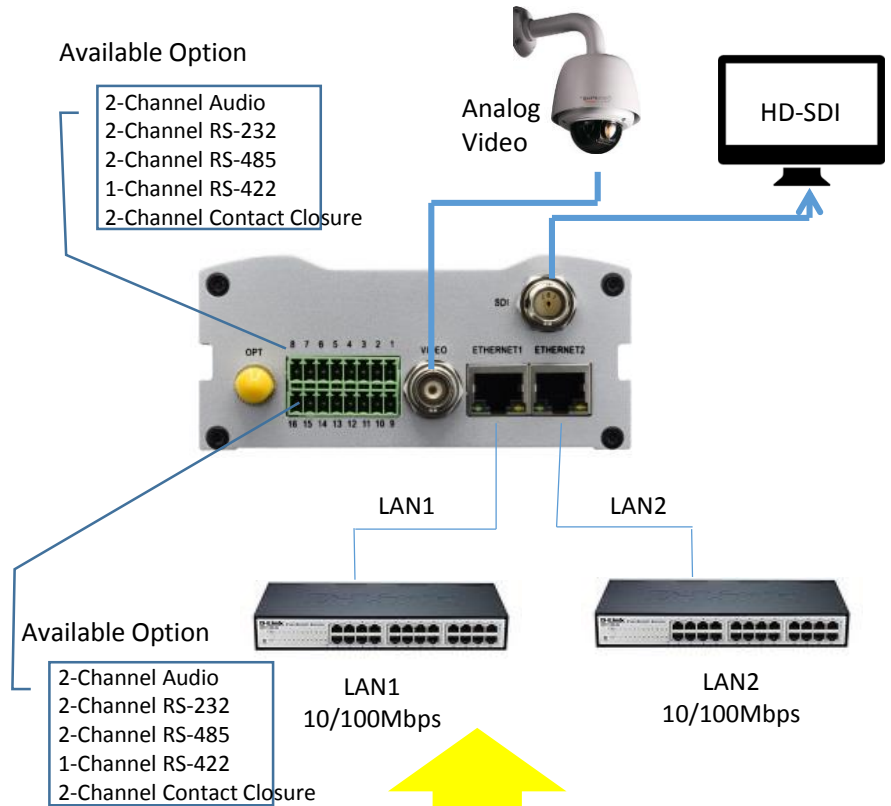
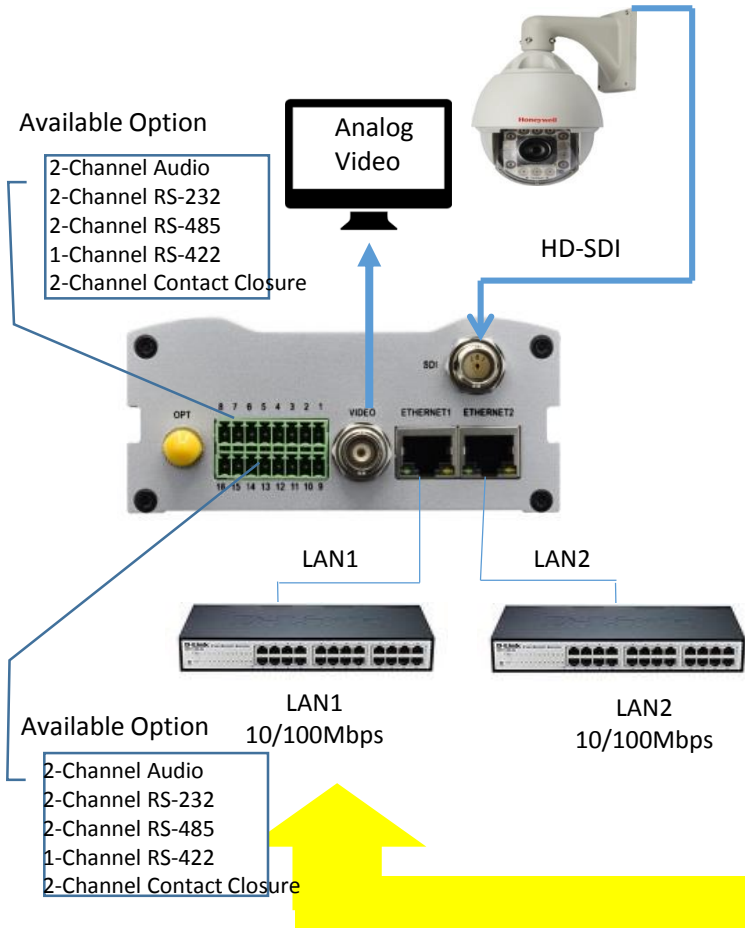


Single Mode(40Km)

3G SDI, Analog(Return), Ethernet, RS-Data & Audio to Fiber Transceiver(WDM)

POT-S01AHD-20KM-Tx-VD

POT-S01AHD-20KM-Rx-VD



Model	POT-S01AHD-20KM-Tx/Rx-VD
HD-SDI	
Video Input	1 BNC, 75Ω unbalanced
Video Output	1 BNC, 75Ω unbalanced
Signal Level	800mVp-p ±10%
Overshoot	10%
Video Format	SD-SDI, HD-SDI, 3G-SDI(Optional)
Multi-format Rate	SMPTE-259M/292M/424M/DVD-ASI
Data Rate	143M, 177M, 270M, 360M, 540M, 1485M, 2970M
Video Format	SD 525i/625i HD 720p24, 25/30, 50/60 HD 1080i, 50/60 HD 1080p24, 25/30, 50/60
Video Coding	8bit, 10bit, 12bit Auto
Return Loss	≤ -15dB @ 5MHz ~ 1.5GHz
Retiming	Auto
Balance mode	Auto
Coupling Mode	AC Coupling
Rise/Fall time	≥0.4ns, ≤ 1.50ns@270MBPS, Difference less than 0.5ns ≤ 270ps @1.485Gbps, Difference less than 100ps ≤ 135ps @2.97Gbps, Difference less than 50ps
Alignment Jitter(100KHz)	≤ 0.2UI@270Mbps, at 1KHz ≤ 0.1UI@1.485Gbps, at 100KHz ≤ 0.3UI@2.97Gbps, at 100KHz
Timing Jitter(10Hz)	≤ 0.2UI@270Mbps ≤ 1.0UI@1.485Gbps ≤ 2.0UI@2.97Gbps
Equalization(1694 A)	>400m , SD-SDI / >200m, HD-SDI, >100m 3G-SDI
Embeded Audio	Support(Streo Analog audio or AES/EBU digital audio)
Alanog Video	
Vido Input	1 BNC, 75Ω unbalanced
Video Output	1 BNC, 75Ω unbalanced
Signal Level	1Vp-p/CVBS
Video Format	PAL/NTSC/SECAM

Model	POT-S01AHD-20KM-Tx/Rx-VD
Data	
Data port	RS-232/RS-485/RS-422 (Selece two)
Data Rate	Manchester, Bi-phase
Data Format	RS232:DC~115.2kbps, RS-422/485:DC~500kbps
Working mode	Simplex, half duplex or full duplex
Signal Level	0.25Vp-p ~ 10Vp-p
Bit Error Rate	< 10 ⁻⁹
Network	
Interface	RJ45, 2port
Standard & Rate	IEEE802.3u, 10Base-T 10/100M Ethernet
Working mode	Full duplex
Audio	
Port Number	2-Ch, duplex Analog Audio
Input /Output Level	2Vp-p/1.5Vp-p
Signal Impedance	10KΩ (unbalanced)
Bandwidth	50Hz~13KHz
Distortion	<1%
S/N ratio	>70dB
Alarm	
Port Number	2Groups
Neteork Management	SNMP Support
Optic	
No. of fiber	1
Optic Connector	ST/PC or FC/PC
Wave Length	1310/1350/1550nm, WDM
Distance	40Km(Option : 20~60Km)
Operating Temperature	-40°C ~ 75°C
Power	12VDC±10%, Max10W
Case Size	112x144x50.8mm
Status Indicator	Power, SDI, Video, Audio, Data, Optical Link
MTBF	100,000Hr

DIMENSIONS

POT-S01AHD-20KM-Tx/Rx-VD

Unit : mm



3G SDI, Analog, Ethernet, RS-Data & Audio to Fiber Transceiver(WDM)

POT-S02AHD-20KM-Tx/Rx-VD

SDI Module

- 2Ch. Uncompressed HD Video signals up to 1080P60
- Support EX-SDI,4K EX-SDI, TDM
- Multi-rate automatic cable equalization
- Max data rate – Up to 3Gbps
- Near Zero latency video
- Error Free pathological pattern operation



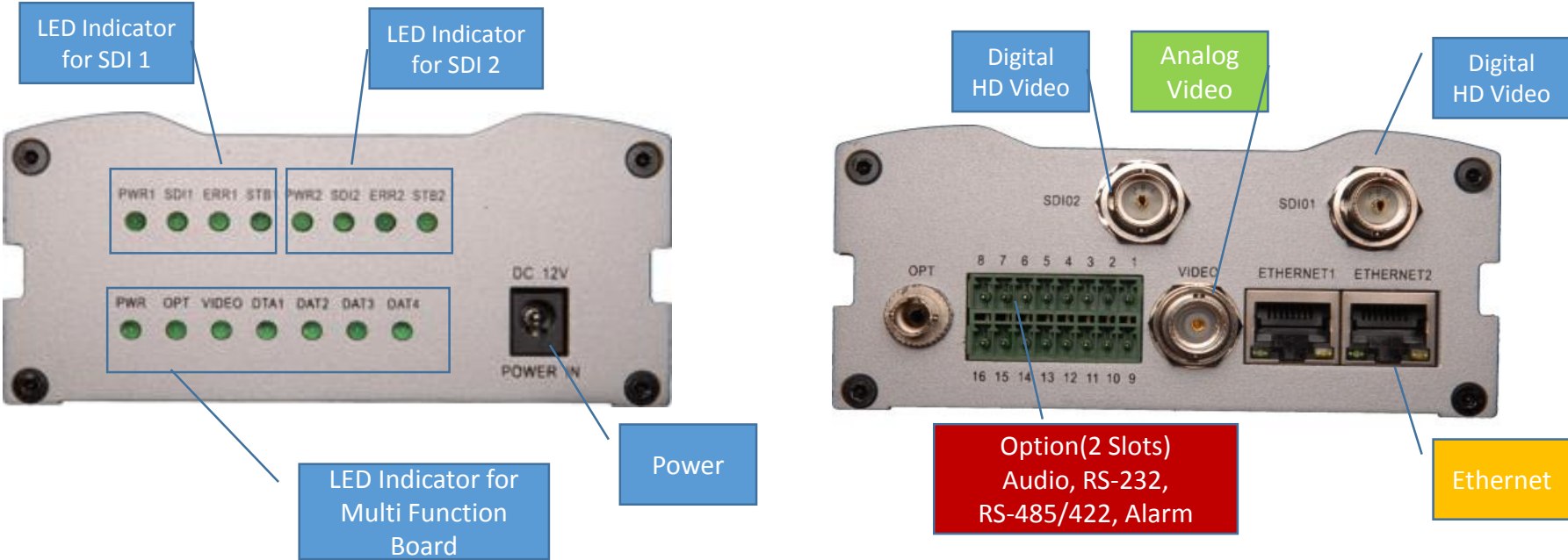
Multi-Function Module

- 1 Analog Video (NTSC/PAL/SECOM)
- 2 IP Ethernet(10/100Mbps)
- Option(Select 2) :
 - + 2 Duplex Audio
 - + 2 Duplex Data (RS-232, RS-485/422)
 - + 2 Contact Closure (5VDC, Relay)



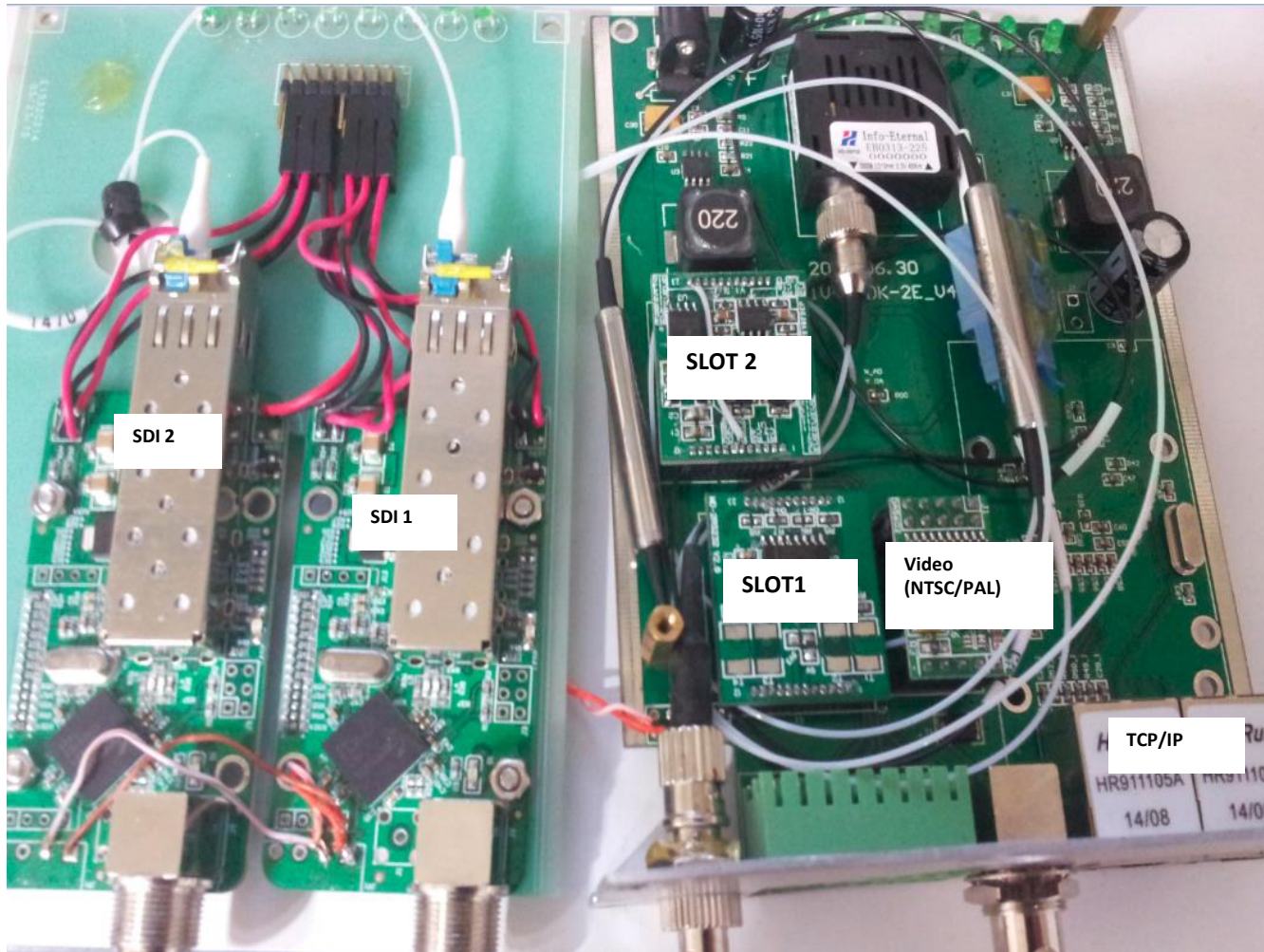
3G SDI, Analog, Ethernet, RS-Data & Audio to Fiber Transceiver(WDM)

POT-S02AHD-20KM-Tx/Rx-VD



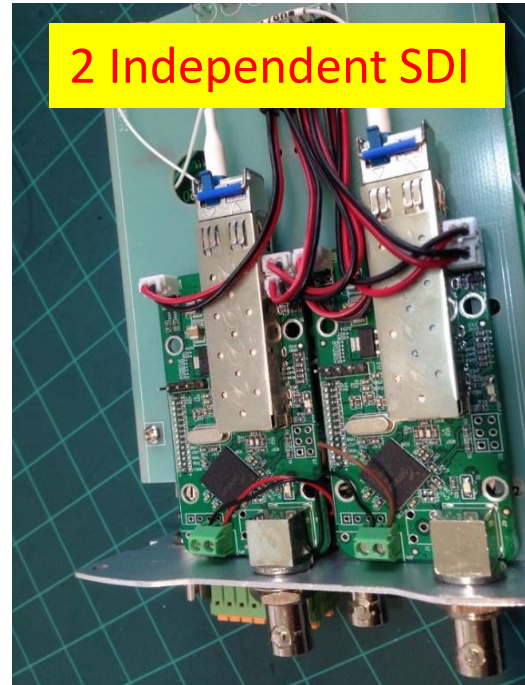
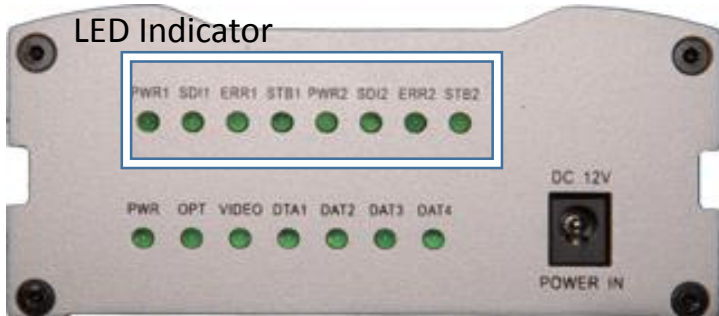
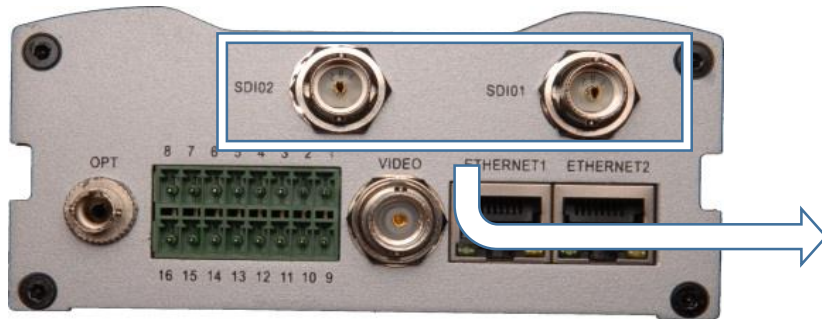
2 3G/HD-SDI + Multi Function transmission Over single fiber

POT-S02AHD-20KM-Tx/Rx-VD



Multi Function Fiber Optic Transmitter

POT-S02AHD-40KM-Tx/Rx-VD



SDI Video :

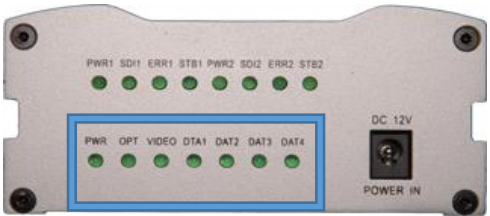
- 3G-SDI
- HD-SDI
- SD-SDI
- 4K EX-SDI
- EX-SDI
- VC2

**SMPTE-259M/292M/424M/DVD-ASI
SD 525i/625i
HD 720p24, 25/30, 50/60
HD 1080i, 50/60
HD 1080p24, 25/30, 50/60
Equalization, Re-clocking
Impedance : BNC, 75Ω unbalanced**

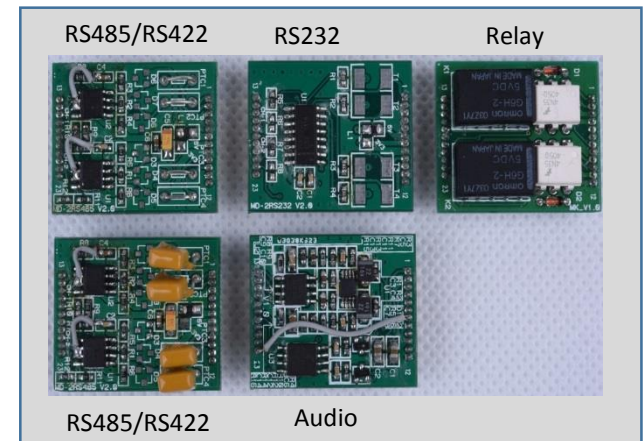
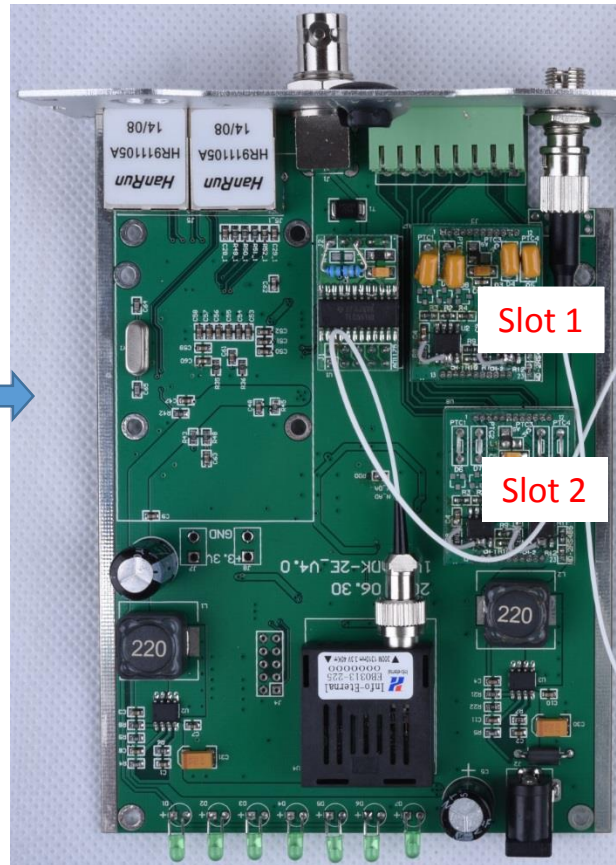
Multi Function Fiber Optic Transmitter

POT-S02AHD-40KM-Tx/Rx-VD

- 2 RJ45 Ethernet(10/100 Ethernet)
- 1 Analog Video (CVBS)



LED Indicator



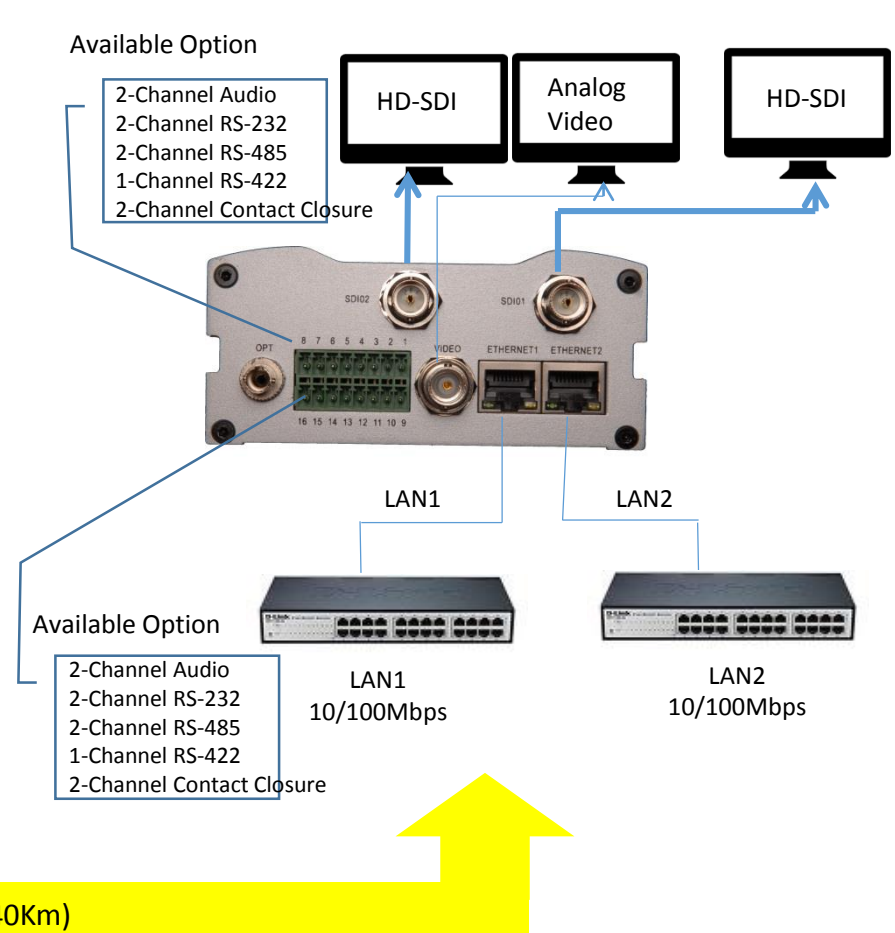
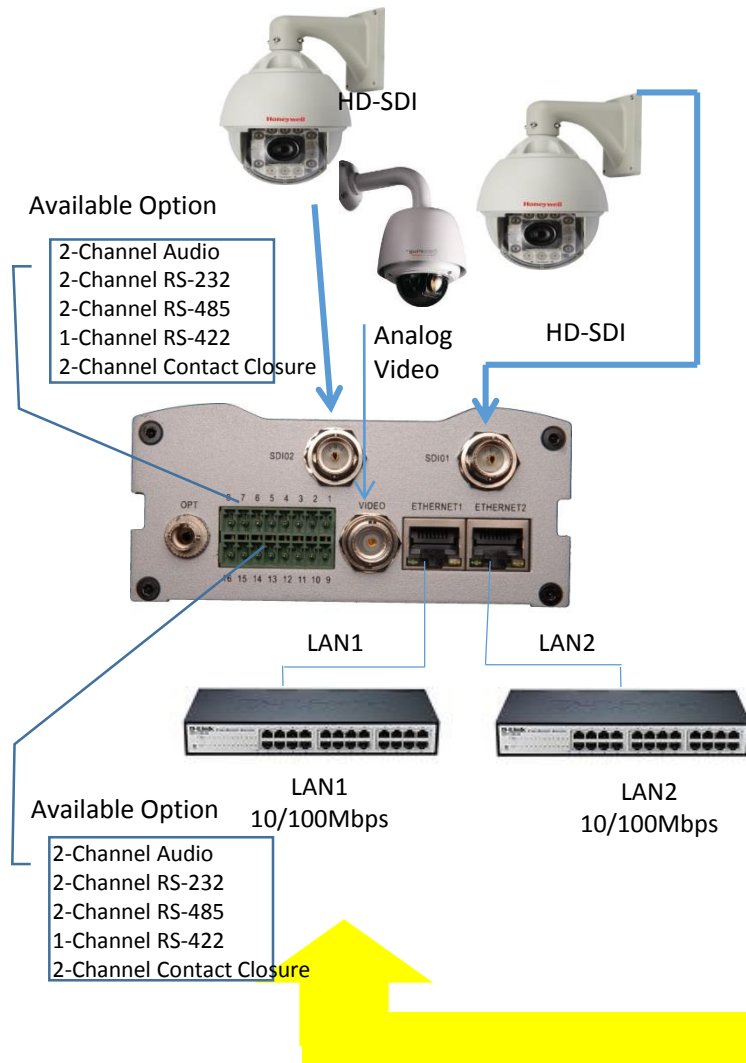
Analog Audio	2-Ch, duplex Analog Audio 2Vp-p/1.5Vp-p Input / Output
RS-232	2-Ch, Simplex, half duplex or full duplex
RS-485	2-Ch, Simplex, half duplex or full duplex
RS-422	1-Ch, Simplex, half duplex or full duplex
Alarm	2Groups, Relay 5VDC

- Select 2 Slot

3G SDI, Analog, Ethernet, RS-Data & Audio to Fiber Transceiver(WDM)

POT-S02AHD-20KM-Tx-VD

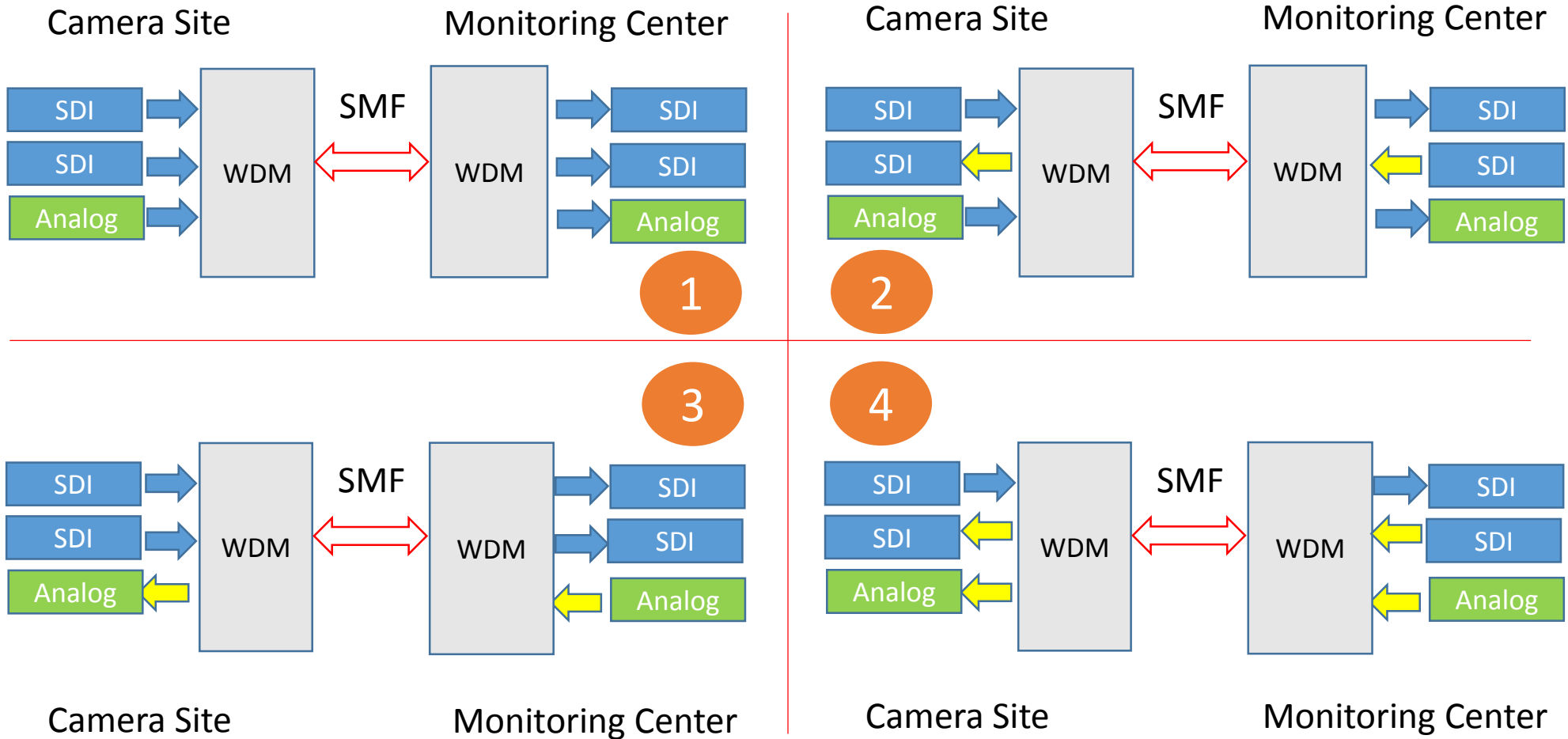
POT-S02AHD-20KM-Rx-VD



Single Mode(40Km)

APPLICATIONS of Fiber Transmission system

POT-S02AHD-40KM-Tx/Rx-VD



Model	POT-S02AHD-20KM-Tx/Rx-VD
HD-SDI	
Video Input	2 BNC, 75Ω unbalanced
Video Output	2 BNC, 75Ω unbalanced
Signal Level	800mVp-p ±10%
Overshoot	10%
Video Format	SD-SDI, HD-SDI, 3G-SDI
Multi-format Rate	SMPTE-259M/292M/424M/DVD-ASI
Data Rate	143M, 177M, 270M, 360M, 540M, 1485M, 2970M
Video Format	SD 525i/625i HD 720p24, 25/30, 50/60 HD 1080i, 50/60 HD 1080p24, 25/30, 50/60
Video Coding	8bit, 10bit, 12bit Auto
Return Loss	≤ -15dB @ 5MHz ~ 1.5GHz
Retiming	Auto
Balance mode	Auto
Coupling Mode	AC Coupling
Rise/Fall time	≥0.4ns, ≤ 1.50ns@270MBPS, Difference less than 0.5ns ≤ 270ps @1.485Gbps, Difference less than 100ps ≤ 135ps @2.97Gbps, Differeace less than 50ps
Alignment Jitter(100KHz)	≤ 0.2UI@270Mbps, at 1KHz ≤ 0.1UI@1.485Gbps, at 100KHz ≤ 0.3UI@2.97Gbps, at 100KHz
Timing Jitter(10Hz)	≤ 0.2UI@270Mbps ≤ 1.0UI@1.485Gbps ≤ 2.0UI@2.97Gbps
Equalization(1694A)	>400m , SD-SDI / >200m, HD-SDI, >100m 3G-SDI
Embaded Audio	Support(Streo Analog audio or AES/EBU digital audio)
Alanog Video	
Vido Input	1 BNC, 75Ω unbalanced
Video Output	1 BNC, 75Ω unbalanced
Signal Level	1Vp-p/CVBS
Video Format	PAL/NTSC/SECAM

Model	POT-S02AHD-20KM-Tx/Rx-VD
Data	
Data port	RS-232/RS-485/RS-422 (Selece two)
Data Rate	Manchester, Bi-phase
Data Format	RS232:DC~115.2kbps, RS-422/485:DC~500kbps
Working mode	Simplex, half duplex or full duplex
Signal Level	0.25Vp-p ~ 10Vp-p
Bit Error Rate	< 10 ⁻⁹
Network	
Interface	RJ45, 2port
Standard & Rate	IEEE802.3u, 10Base-T 10/100M Ethernet
Working mode	Full duplex
Audio	
Port Number	2-Ch, duplex Analog Audio
Input /Output Level	2Vp-p/1.5Vp-p
Signal Impedance	10KΩ (unbalanced)
Bandwidth	50Hz~13KHz
Distortion	<1%
S/N ratio	>70dB
Alarm	
Port Number	2Groups
Neteork Management	
	SNMP Support
Optic	
No. of fiber	1
Optic Connector	ST/PC or FC/PC
Wave Length	1310/1350/1550nm, WDM
Distance	40Km(Option : 20~60Km)
Operating Temperature	-40°C ~ 75°C
Power	12VDC±10%, Max10W
Case Size	112x144x50.8mm
Status Indicator	Power, SDI, Video, Audio, Data, Optical Link
MTBF	100,000Hr

DIMENSIONS

POT-S02AHD-20KM-Tx/Rx-VD

Unit : mm



4K Fiber Transmission System

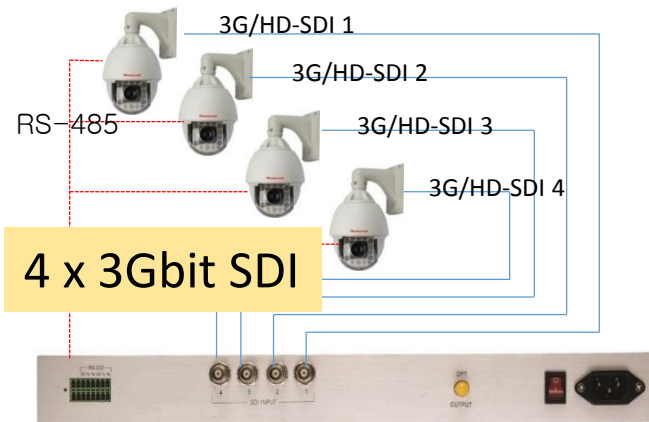
POT-S04HD-40KM-Tx/Rx



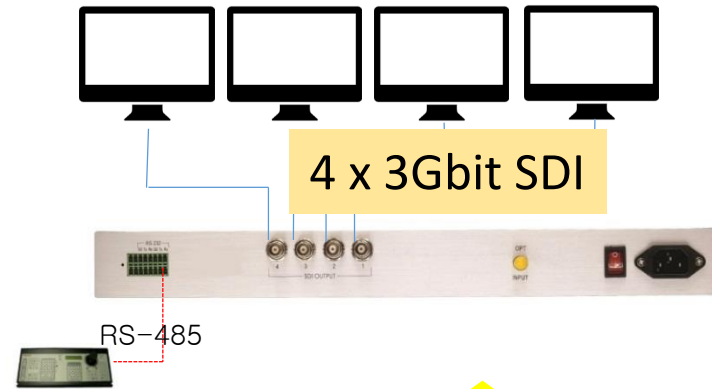
- Support for **4 independent 3G/HD/SD-SDI Channel**
- **Support 4K EX-SDI, EX-SDI and VC2**
- Uncompressed HD Video signals
- Transport 4K(uncompressed) up to 40km
- Each Channel supports resolutions up to 1080p/60Hz
- Error Free pathological pattern operation
- Each channel individually reclocked
- Embedded audio / metadata support for each channel
- LED indicators for channel activity and power
- 1U, 19" rack mount type
- SNMP Protocol
- AC100V~240V Operation

4K Fiber Transmission System

POT-S04HD-40KM-Tx



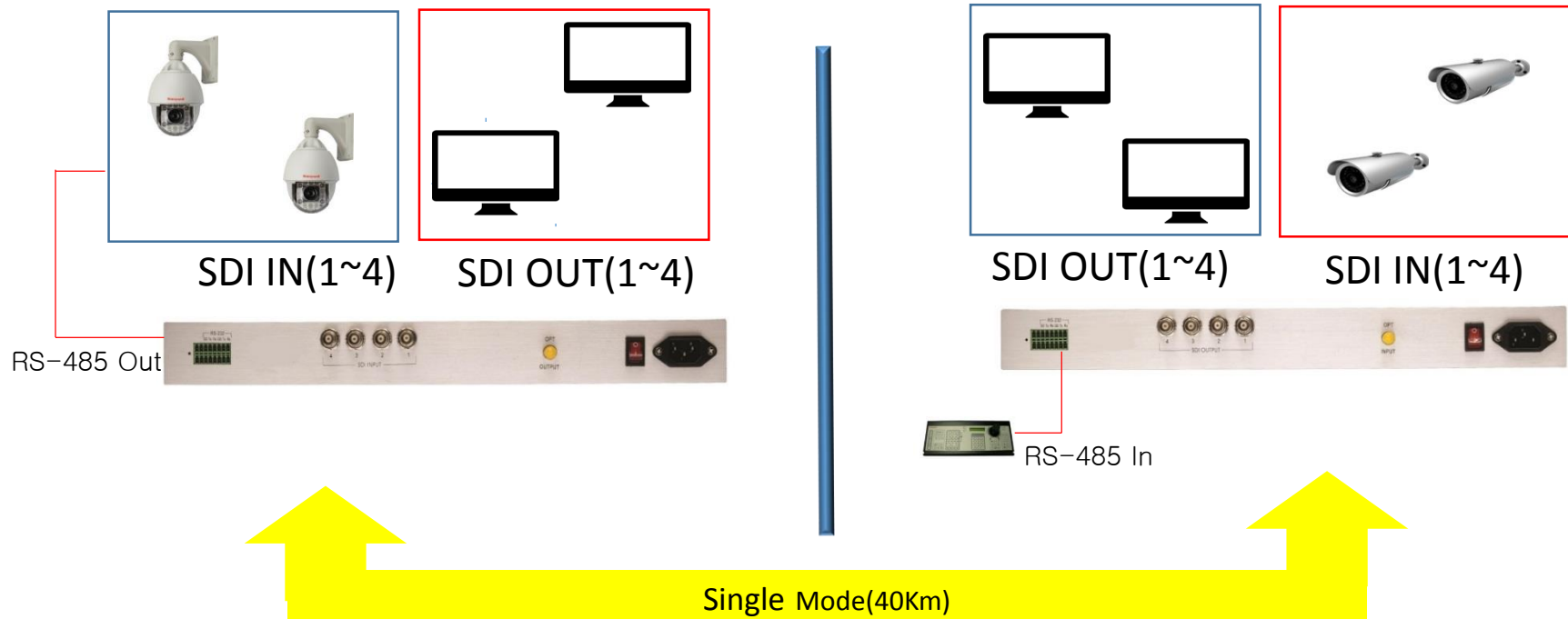
POT-S04HD-40KM-Rx



Single Mode(40Km)

3Gbit SDI Bidirectional Fiber Transport

POT-S04HD-20KM-Tx/Rx-VD-B

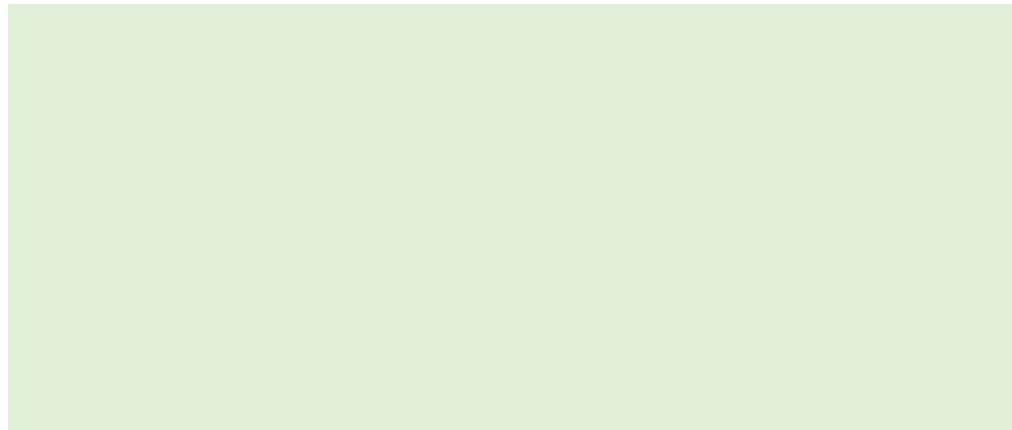
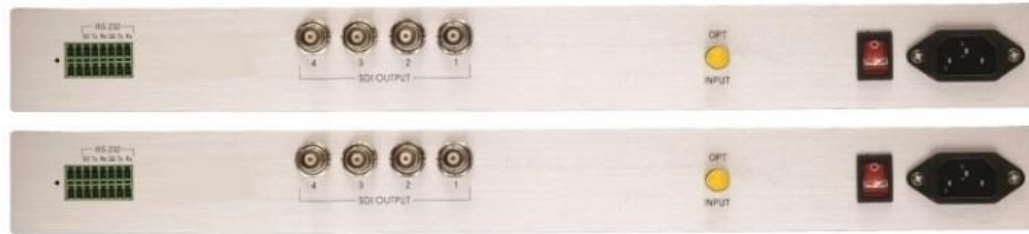


Model	POT-S04HD-40KM-Tx/Rx	Model	POT-S04HD-40KM-Tx/Rx
HD-SDI		Data	
Video Input	4 BNC, 75Ω unbalanced	Data port	RS-485
Video Output	4 BNC, 75Ω unbalanced	Data Rate	Manchester, Bi-phase
Signal Level	800mVp-p ±10%	Data Format	RS-485:DC~500kbps
Overshoot	10%	Working mode	half duplex
Video Format	SD-SDI, HD-SDI, 3G-SDI(Optional)	Signal Level	0.25Vp-p ~ 10Vp-p
Multi-format Rate	SMPTE-259M/292M/424M/DVD-ASI	Bit Error Rate	< 10 ⁻⁹
Data Rate	143M, 177M, 270M, 360M, 540M, 1485M, 2970M	Port Number	2Groups
Video Format	SD 525i/625i HD 720p24, 25/30, 50/60 HD 1080i, 50/60 HD 1080p24, 25/30, 50/60	SNMP	Support
Video Coding	8bit, 10bit, 12bit Auto	Optic	
Return Loss	≤ -15dB @ 5MHz ~ 1.5GHz	No. of fiber	1
Retiming	Auto	Optic Connector	ST/PC or FC/PC
Balance mode	Auto	Wave Length	1310/1350/1370/1390/1470/1550nm, WDM
Coupling Mode	AC Coupling	Distance	40Km(Option : 20~60Km)
Rise/Fall time	≥0.4ns, ≤ 1.50ns@270MBPS, Difference less than 0.5ns ≤ 270ps @1.485Gbps, Difference less than 100ps ≤ 135ps @2.97Gbps, Difference less than 50ps	Operating Temperature	-40°C ~ 75°C
Alignment Jitter(100KHz)	≤ 0.2UI@270Mbps, at 1KHz ≤ 0.1UI@1.485Gbps, at 100KHz ≤ 0.3UI@2.97Gbps, at 100KHz	Power	12VDC±10%, Max70W
Timing Jitter(10Hz)	≤ 0.2UI@270Mbps ≤ 1.0UI@1.485Gbps ≤ 2.0UI@2.97Gbps	Case Size	19inch, 1U 483x160x45mm
Equalization(1694A)	>400m , SD-SDI / >200m, HD-SDI, >100m 3G-SDI	Status Indicator	Power, SDI, Video, Audio, Data, Optical Link
Embaded Audio	Support(Stereo Analog audio or AES/EBU digital audio)	MTBF	100,000Hr

DIMENSIONS

POT-S04HD-40KM-Tx/Rx

Unit : mm



165



483

45

8xSDI(8K 24G) Fiber Transport

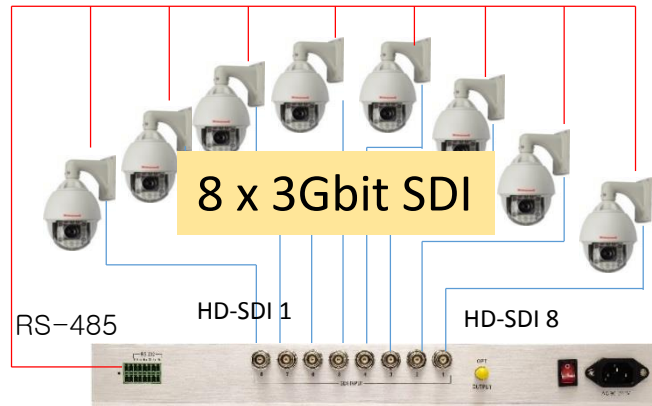
POT-S08HD-40KM-Tx/Rx



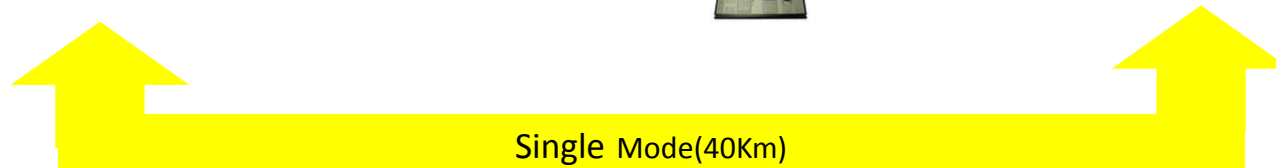
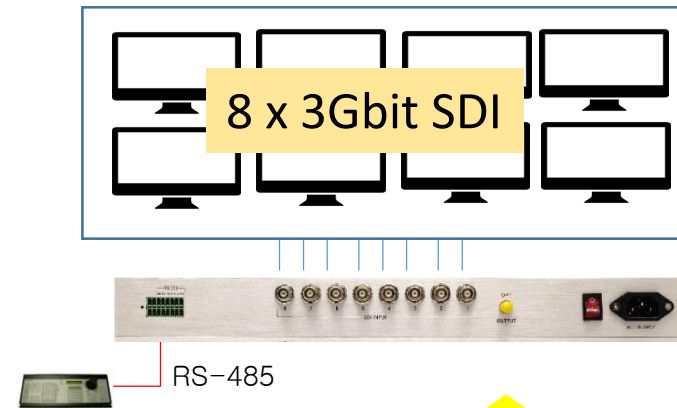
- Support for **8 independent 3G/HD/SD-SDI Channel**
- Transport 8K(uncompressed) up to 40km
- Each Channel supports resolutions up to 1080p/60Hz
- Each channel individually reclocked
- Embedded audio / metadata support for each channel
- LED indicators for channel activity and power
- 1U, 19" rack mount type
- SNMP Protocol

8xSDI(8K 24G) Fiber Transport

POT-S08HD-40KM-Tx

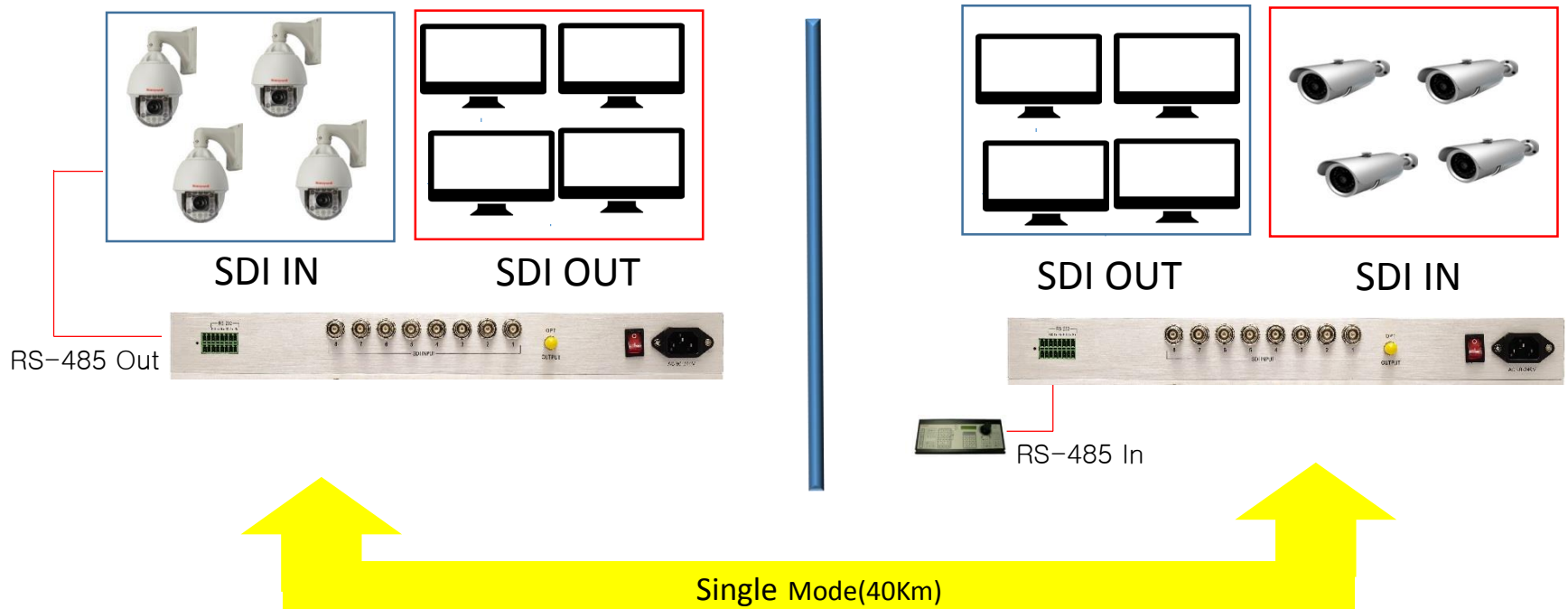


POT-S08HD-40KM-Rx



4xSDI(4K 12G) Bidirectional Fiber Transport

POT-S08HD-40KM-Tx/Rx-VD-B



Model	POT-S08HD-40KM-Tx/Rx
HD-SDI	
Video Input	8 BNC, 75Ω unbalanced
Video Output	8 BNC, 75Ω unbalanced
Signal Level	800mVp-p ±10%
Overshoot	10%
Video Format	SD-SDI, HD-SDI, 3G-SDI(Option)
Multi-format Rate	SMPTE-259M/292M/424M/DVD-ASI
Data Rate	143M, 177M, 270M, 360M, 540M, 1485M, 2970M
Video Format	SD 525i/625i HD 720p24, 25/30, 50/60 HD 1080i, 50/60 HD 1080p24, 25/30, 50/60
Video Coding	8bit, 10bit, 12bit Auto
Return Loss	≤ -15dB @ 5MHz ~ 1.5GHz
Retiming	Auto
Balance mode	Auto
Coupling Mode	AC Coupling
Rise/Fall time	≥0.4ns, ≤ 1.50ns@270MBPS, Difference less than 0.5ns ≤ 270ps @1.485Gbps, Difference less than 100ps ≤ 135ps @2.97Gbps, Difference less than 50ps
Alignment Jitter(100KHz)	≤ 0.2UI@270Mbps, at 1KHz ≤ 0.1UI@1.485Gbps, at 100KHz ≤ 0.3UI@2.97Gbps, at 100KHz
Timing Jitter(10Hz)	≤ 0.2UI@270Mbps ≤ 1.0UI@1.485Gbps ≤ 2.0UI@2.97Gbps
Equalization(1694A)	>400m , SD-SDI / >200m, HD-SDI, >100m 3G-SDI
Embaded Audio	Support(Streo Analog audio or AES/EBU digital audio)

Model	POT-S08HD-40KM-Tx/Rx
Data	
Data port	RS-485
Data Rate	Manchester, Bi-phase
Data Format	RS-485:DC~500kbps
Working mode	half duplex
Signal Level	0.25Vp-p ~ 10Vp-p
Bit Error Rate	< 10 ⁻⁹
Port Number	2Groups
SNMP	Support
Optic	
No. of fiber	1
Optic Connector	ST/PC or FC/PC
Wave Length	1310/1350/1370/1390/1470/1490/1550/1570/1590/ 1610nm, WDM
Distance	40Km(Option : 20~60Km)
Operating Temperature	-40°C ~ 75°C
Power	12VDC±10%, Max1000W
Case Size	19inch, 1U 483x160x45mm
Status Indicator	Power, SDI, Video, Audio, Data, Optical Link
MTBF	100,000Hr

DIMENSIONS

POT-S08HD-40KM-Tx/Rx

Unit : mm



4 3G/HD-SDI + 1 Analog Video + 2 IP Ethernet + 2 Duplex Audio + 2 Duplex Data + 2 Contact Closure Over single fiber

POT-S04AHD-40KM-Tx/Rx-VD

SDI Module

- 4Ch. Uncompressed HD Video signals up to 1080P60
- Support EX-SDI,4K EX-SDI, TDM
- Multi-rate automatic cable equalization
- Max data rate – Up to 3Gbps
- Near Zero latency video
- Error Free pathological pattern operation



Multi-Function Module

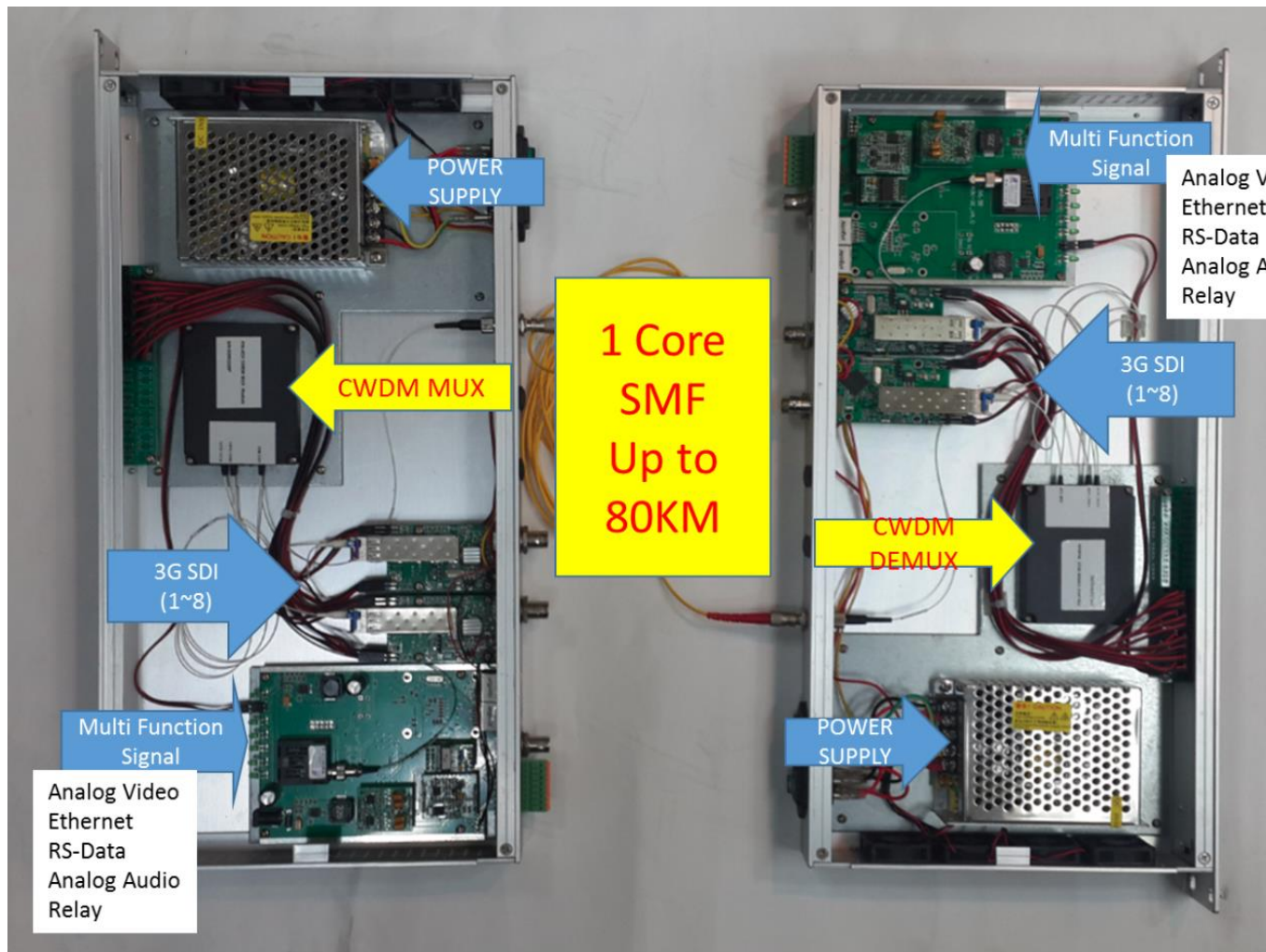
- 1 Analog Video (NTSC/PAL/SECOM)
- 2 IP Ethernet(10/100Mbps)
- Option(Select 2) :
 - + 2 Duplex Audio
 - + 2 Duplex Data (RS-232, RS-485/422)
 - + 2 Contact Closure (5VDC, Relay)



4 3G/HD-SDI + 1 Analog Video + 2 IP Ethernet + 2 Duplex Audio + 2 Duplex Data + 2 Contact Closure Over single fiber

POT-S04AHD-40KM-Tx/Rx-VD

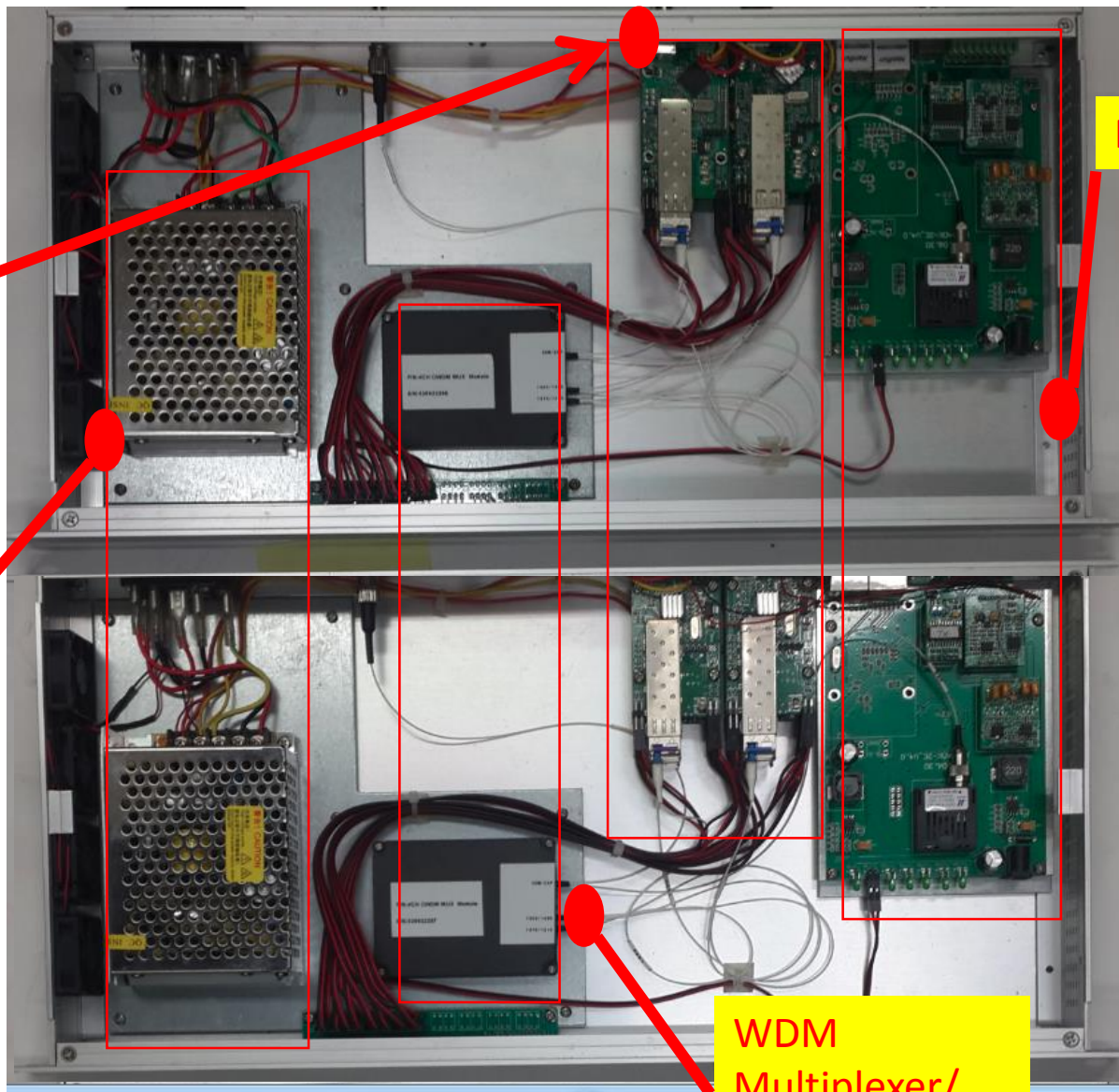
Independent SDIs and Multi function board configuration



4 x 1Ch. 3G-SDI Fiber Optic Link

SDI Video :

- 3G-SDI
- HD-SDI
- SD-SDI
- 4K EX-SDI
- EX-SDI
- VC2



Multi Function Board

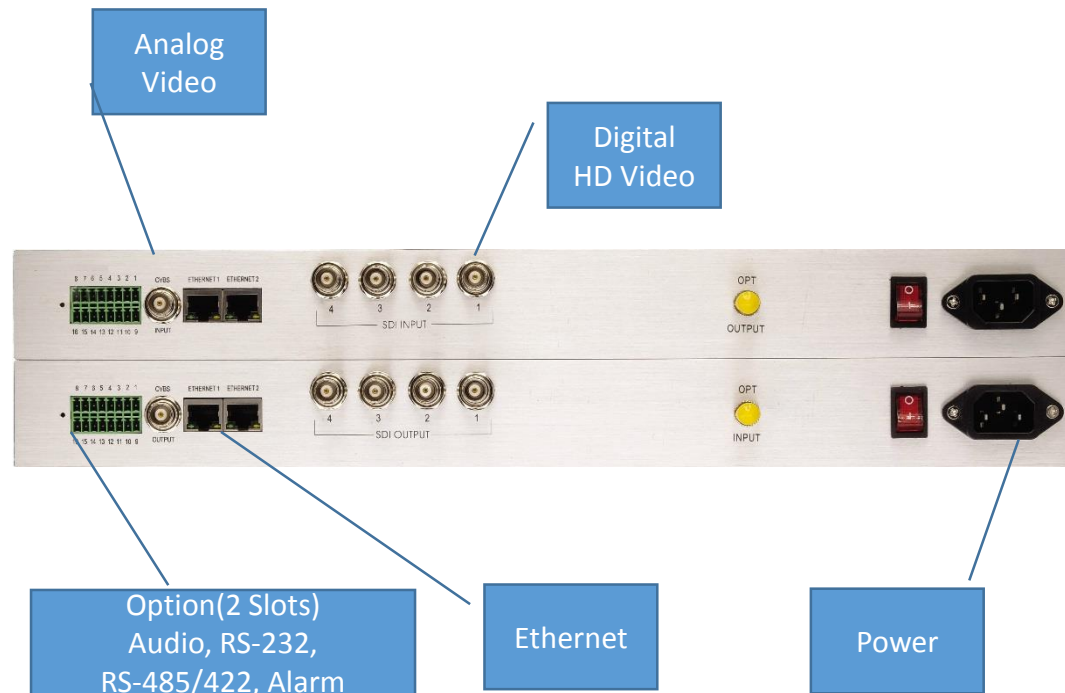
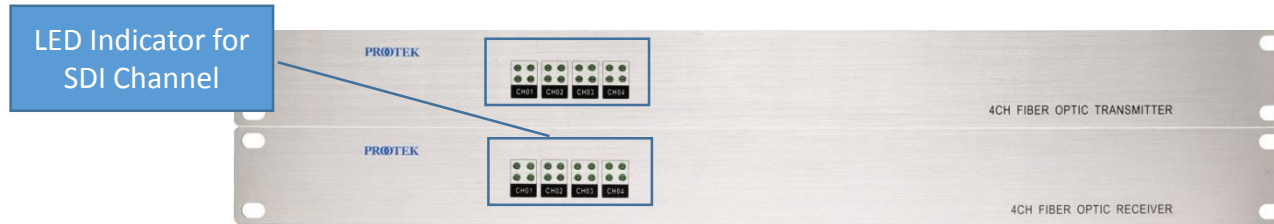
- 2 RJ45 Ethernet
- 1 Analog Video
- Select 2 Slot
 - ✓ 2 Audio/slot
 - ✓ 2 RS-232/slot
 - ✓ 2 RS-485 /slot
 - ✓ 1 RS-422 /Slot
 - ✓ 2 Alarm / Slot

Power Supply

WDM Multiplexer/ Demultiplexer

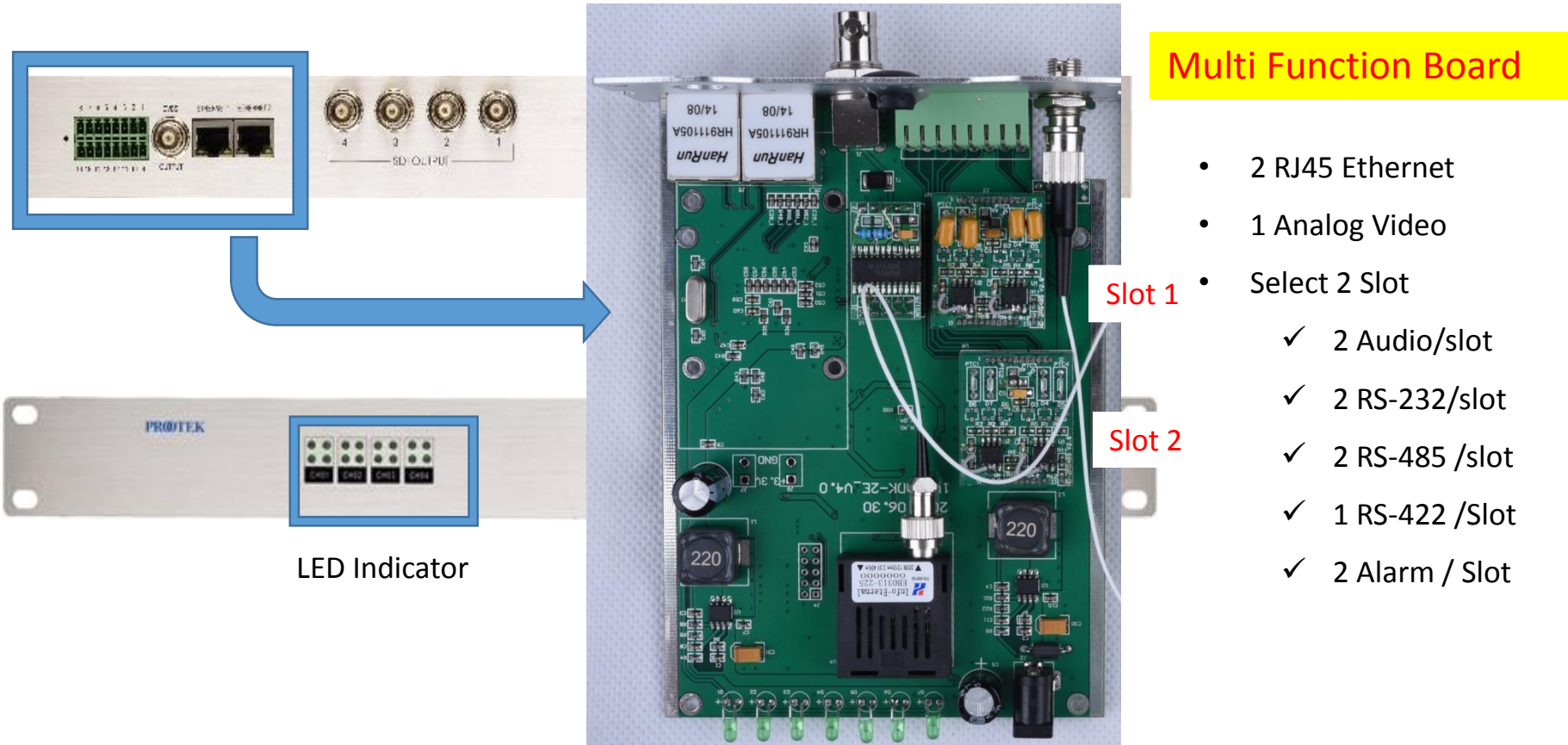
3G SDI, Analog, Ethernet, RS-Data & Audio to Fiber Transceiver(WDM)

POT-S04AHD-40KM-Tx/Rx-VD



Multi Function Fiber Optic Transmitter

2 RJ45 Ethernet + 1 Analog Video + 2 Slot for Audio, RS-232, RS-485/422 and Alarm

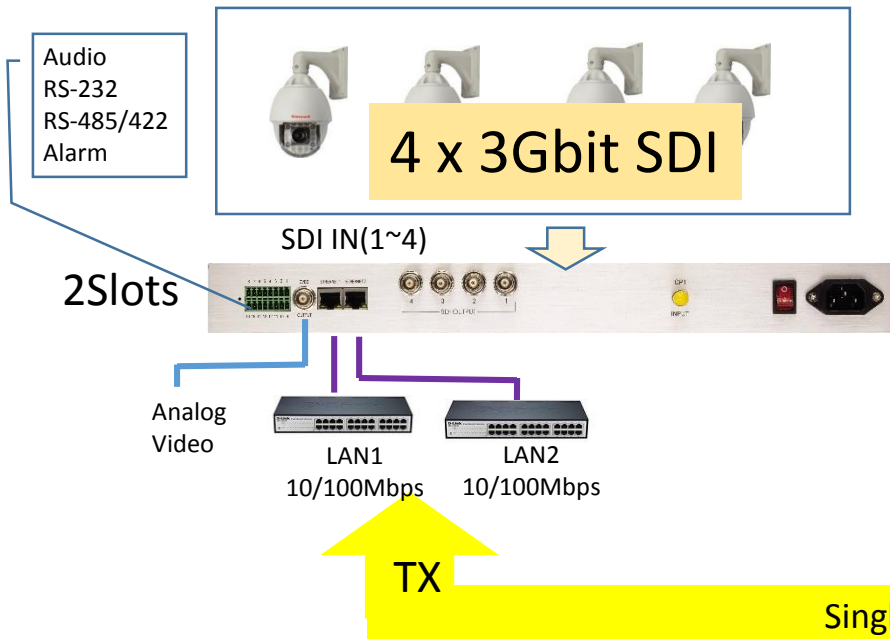


Multi Function Board

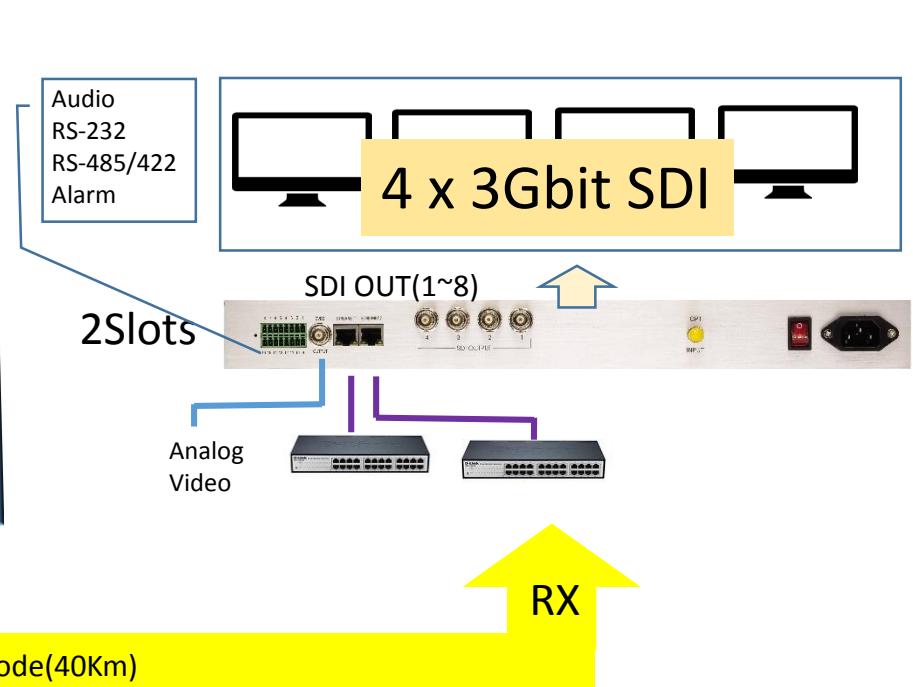
- 2 RJ45 Ethernet
- 1 Analog Video
- Select 2 Slot
 - ✓ 2 Audio/slot
 - ✓ 2 RS-232/slot
 - ✓ 2 RS-485 /slot
 - ✓ 1 RS-422 /Slot
 - ✓ 2 Alarm / Slot

4xSDI(4K 12G) Fiber Transport + Analog Video + 2 x Ethernet

POT-S04AHD-40KM-Tx-VD



POT-S04AHD-40KM-Rx-VD



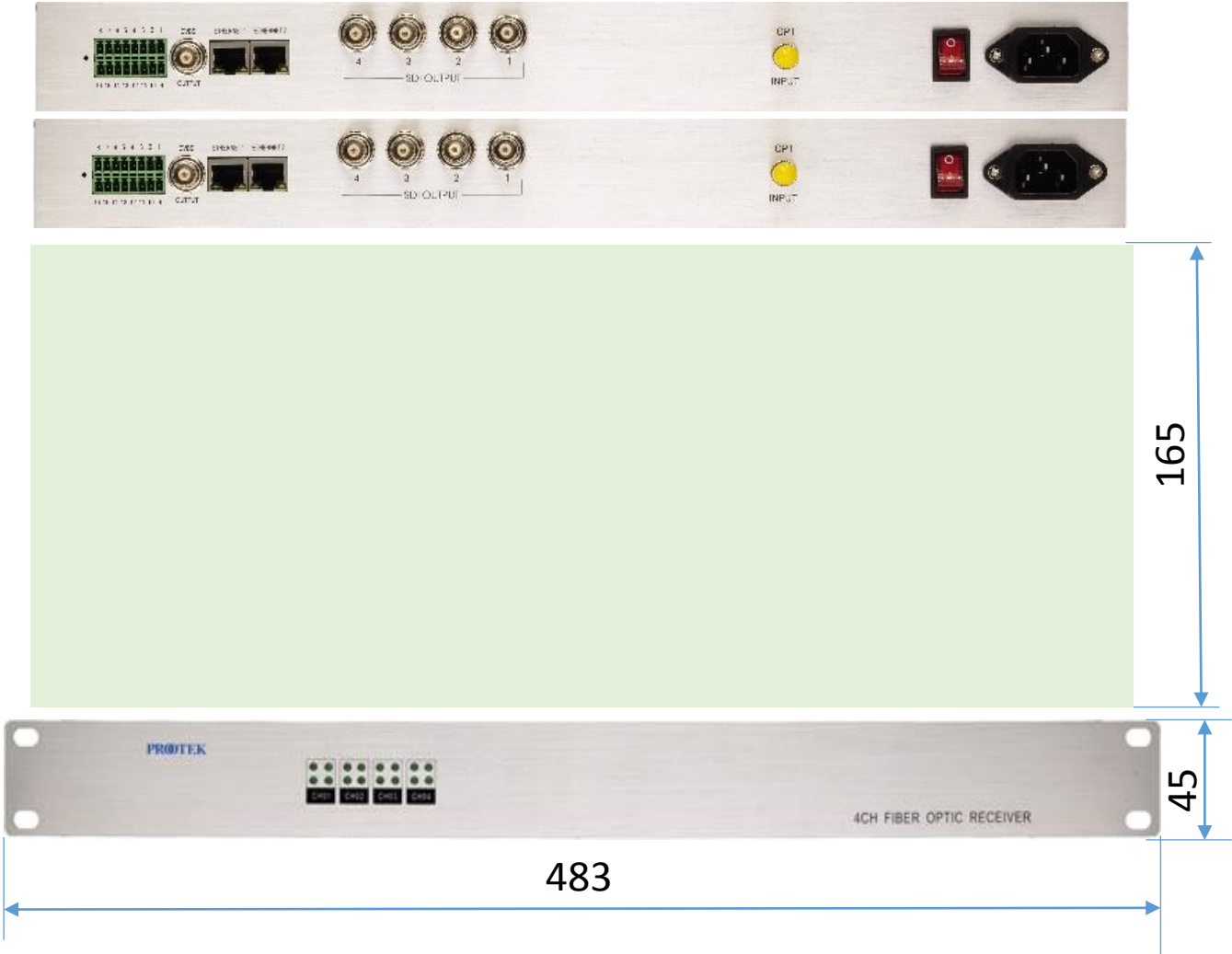
Model	POT-S04AHD-Tx/Rx-VD
HD-SDI	
Video Input	4 BNC, 75Ω unbalanced
Video Output	4 BNC, 75Ω unbalanced
Signal Level	800mVp-p ±10%
Overshoot	10%
Video Format	SD-SDI, HD-SDI, 3G-SDI(Option)
Multi-format Rate	SMPTE-259M/292M/424M/DVD-ASI
Data Rate	143M, 177M, 270M, 360M, 540M, 1485M, 2970M
Video Format	SD 525i/625i HD 720p24, 25/30, 50/60 HD 1080i, 50/60 HD 1080p24, 25/30, 50/60
Video Coding	8bit, 10bit, 12bit Auto
Return Loss	≤ -15dB @ 5MHz ~ 1.5GHz
Retiming	Auto
Balance mode	Auto
Coupling Mode	AC Coupling
Rise/Fall time	≥0.4ns, ≤ 1.50ns@270MBPS, Difference less than 0.5ns ≤ 270ps @1.485Gbps, Difference less than 100ps ≤ 135ps @2.97Gbps, Differeace less than 50ps
Alignment Jitter(100KHz)	≤ 0.2UI@270Mbps, at 1KHz ≤ 0.1UI@1.485Gbps, at 100KHz ≤ 0.3UI@2.97Gbps, at 100KHz
Timing Jitter(10Hz)	≤ 0.2UI@270Mbps ≤ 1.0UI@1.485Gbps ≤ 2.0UI@2.97Gbps
Equalization(1694A)	>400m , SD-SDI / >200m, HD-SDI, >100m 3G-SDI
Embaded Audio	Support(Streo Analog audio or AES/EBU digital audio)
Alanog Video	
Vido Input	1 BNC, 75Ω unbalanced
Video Output	1 BNC, 75Ω unbalanced
Signal Level	1Vp-p/CVBS
Video Format	PAL/NTSC/SECAM

Model	POT-S04AHD-Tx/Rx-VD
Data	
Data port	RS-232/RS-485/RS-422 (Selece two)
Data Rate	Manchester, Bi-phase
Data Format	RS232:DC~115.2kbps, RS-422/485:DC~500kbps
Working mode	Simplex, half duplex or full duplex
Signal Level	0.25Vp-p ~ 10Vp-p
Bit Error Rate	< 10 ⁻⁹
Network	
Interface	RJ45, 2port
Standard & Rate	IEEE802.3u, 10Base-T 10/100M Ethernet
Working mode	Full duplex
Audio	
Port Number	2-Ch, duplex Analog Audio
Input /Output Level	2Vp-p/1.5Vp-p
Signal Impedance	10KΩ (unbalanced)
Bandwidth	50Hz~13KHz
Distortion	<1%
S/N ratio	>70dB
Alarm	
Port Number	2Groups
Neteork Management	SNMP Support
Optic	
No. of fiber	1
Optic Connector	ST/PC or FC/PC
Wave Length	1310/1350/1370/1390/1470/1550nm, WDM
Distance	40Km(Option : 20~60Km)
Operating Temperature	-40°C ~ 75°C
Power	12VDC±10%, Max70W
Case Size	112x144x50.8mm
Status Indicator	Power, SDI, Video, Audio, Data, Optical Link
MTBF	100,000Hr

DIMENSIONS

POT-S04AHD-40KM-Tx/Rx-VD

Unit : mm



8 3G/HD-SDI + 1 Analog Video + 2 IP Ethernet + 2 Duplex Audio + 2 Duplex Data + 2 Contact Closure Over single fiber

SDI Module

- 8Ch. Uncompressed HD Video signals up to 1080P60
- Support EX-SDI,4K EX-SDI, TDM
- Multi-rate automatic cable equalization
- Max data rate – Up to 3Gbps
- Near Zero latency video
- Error Free pathological pattern operation

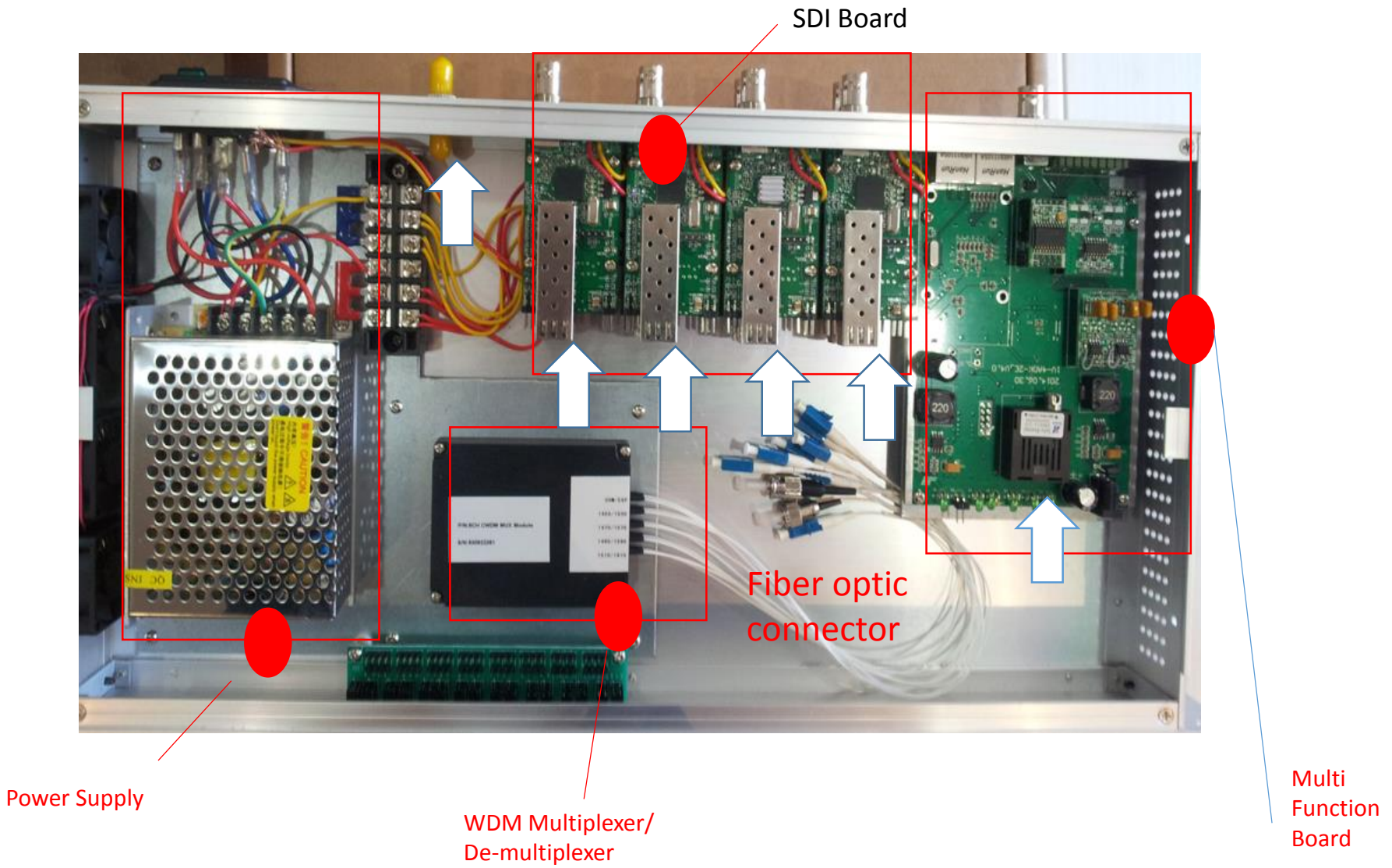


Multi-Function Module

- 1 Analog Video (NTSC/PAL/SECOM)
- 2 IP Ethernet(10/100Mbps)
- Option(Select 2) :
 - + 2 Duplex Audio
 - + 2 Duplex Data (RS-232, RS-485/422)
 - + 2 Contact Closure (5VDC, Relay)



8x 1Ch. 3G-SDI Fiber Optic Link

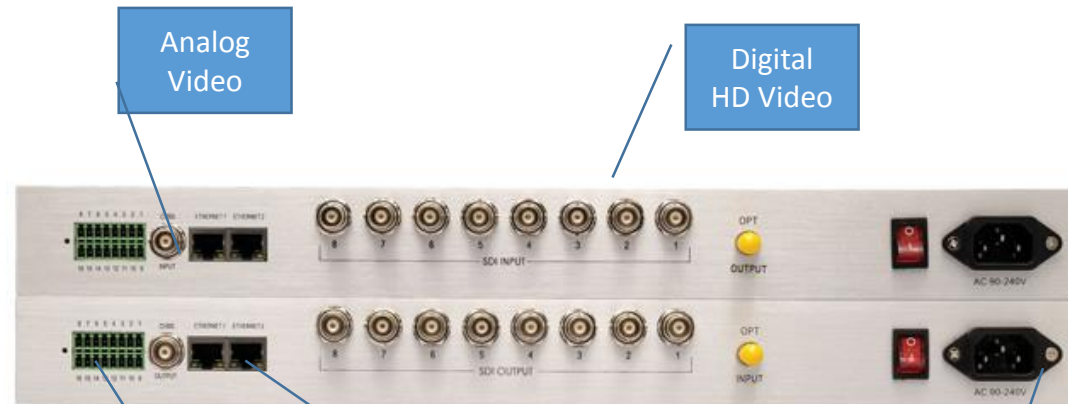


3G SDI, Analog, Ethernet, RS-Data & Audio to Fiber Transceiver(WDM)

POT-S08AHD-40KM-Tx/Rx-VD

Signal of In/Out

- 2 RJ45 Ethernet
- 1 Analog Video
- Select 2 Slot
 - ✓ 2 Audio/slot
 - ✓ 2 RS-232/slot
 - ✓ 2 RS-485 /slot
 - ✓ 1 RS-422 /Slot
 - ✓ 2 Alarm / Slot



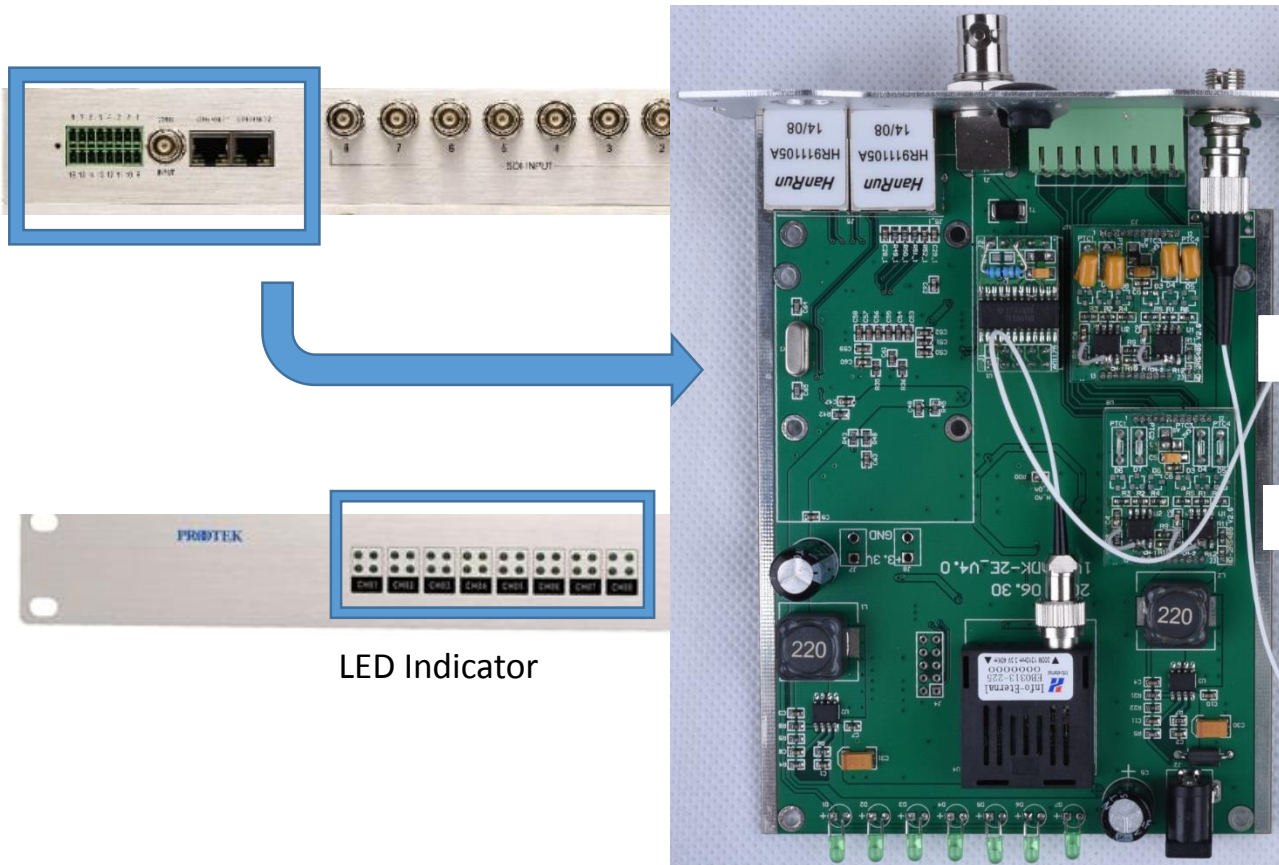
SDI Video :

- 3G-SDI
- HD-SDI
- SD-SDI
- 4K EX-SDI
- EX-SDI
- VC2



Multi Function Fiber Optic Transmitter

2 RJ45 Ethernet + 1 Analog Video + 2 Slot for Audio, RS-232, RS-485/422 and Alarm

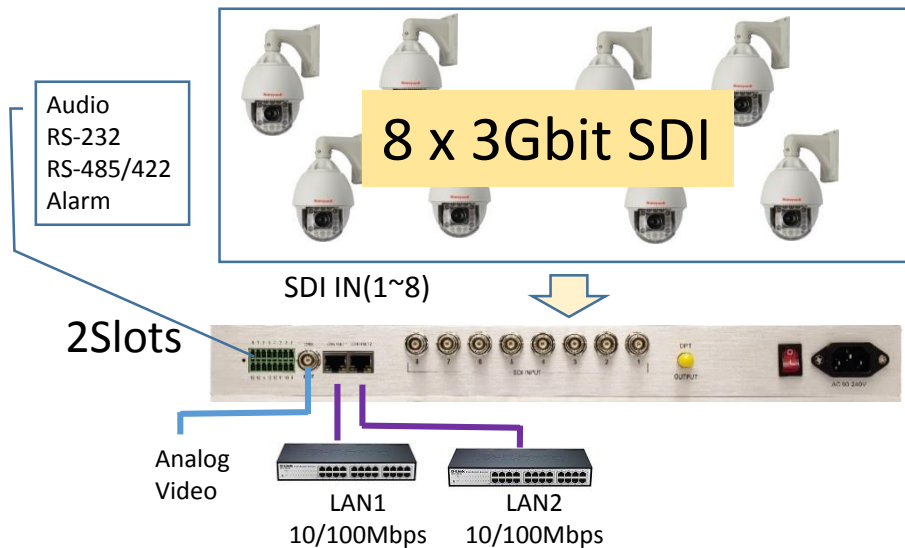


Multi Function Board

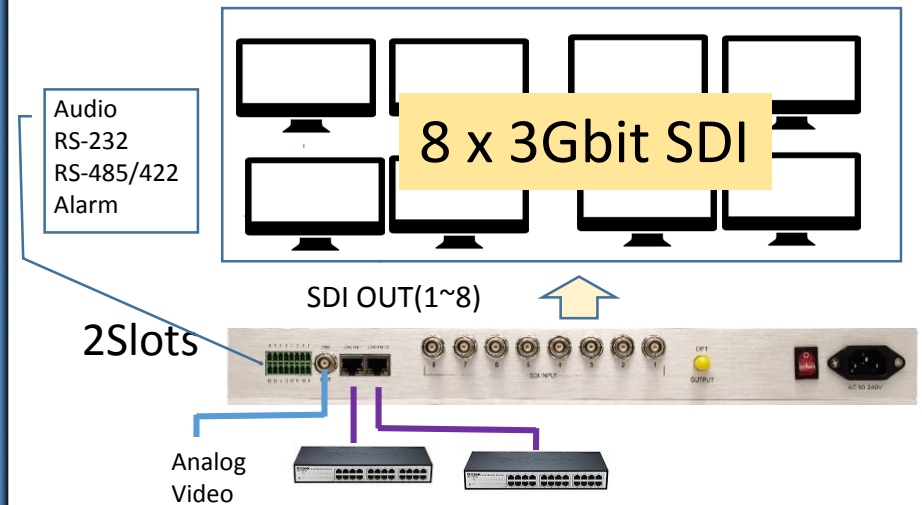
- 2 RJ45 Ethernet
- 1 Analog Video
- Select 2 Slot
 - ✓ 2 Audio/slot
 - ✓ 2 RS-232/slot
 - ✓ 2 RS-485 /slot
 - ✓ 1 RS-422 /Slot
 - ✓ 2 Alarm / Slot

8xSDI(8K 24G) Fiber Transport + Analog Video + 2 x Ethernet

POT-S08AHD-40KM-Tx-VD



POT-S08AHD-40KM-Rx-VD



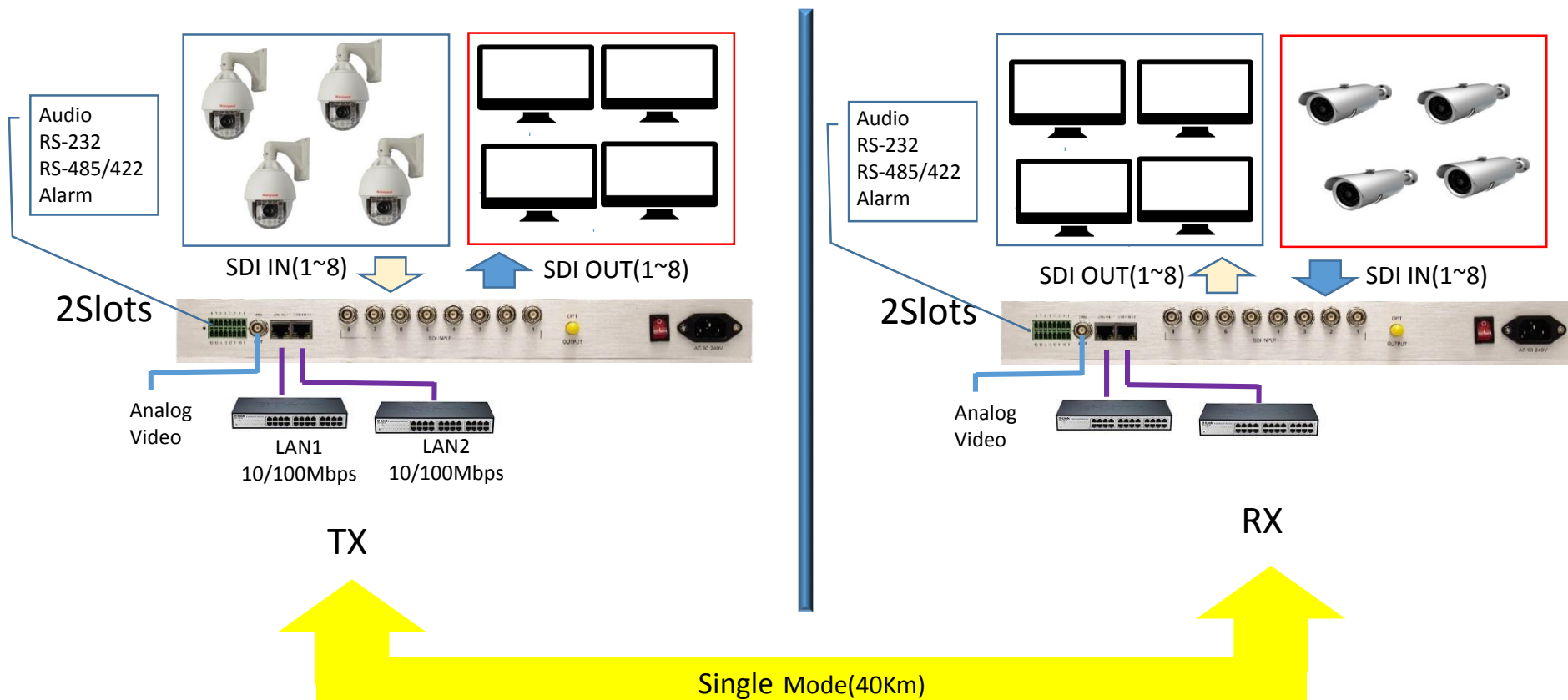
Single Mode(40Km)

This can be used to transport 8 discreet SDI signals(SD/HD/3G) or it can be used for transporting a single 8K(24G) signal over a single fiber

4xSDI(4K 12G) Bidirectional Fiber Transport

POT-S08AHD-20KM-Tx-VD-B

POT-S08AHD-20KM-Rx-VD-B



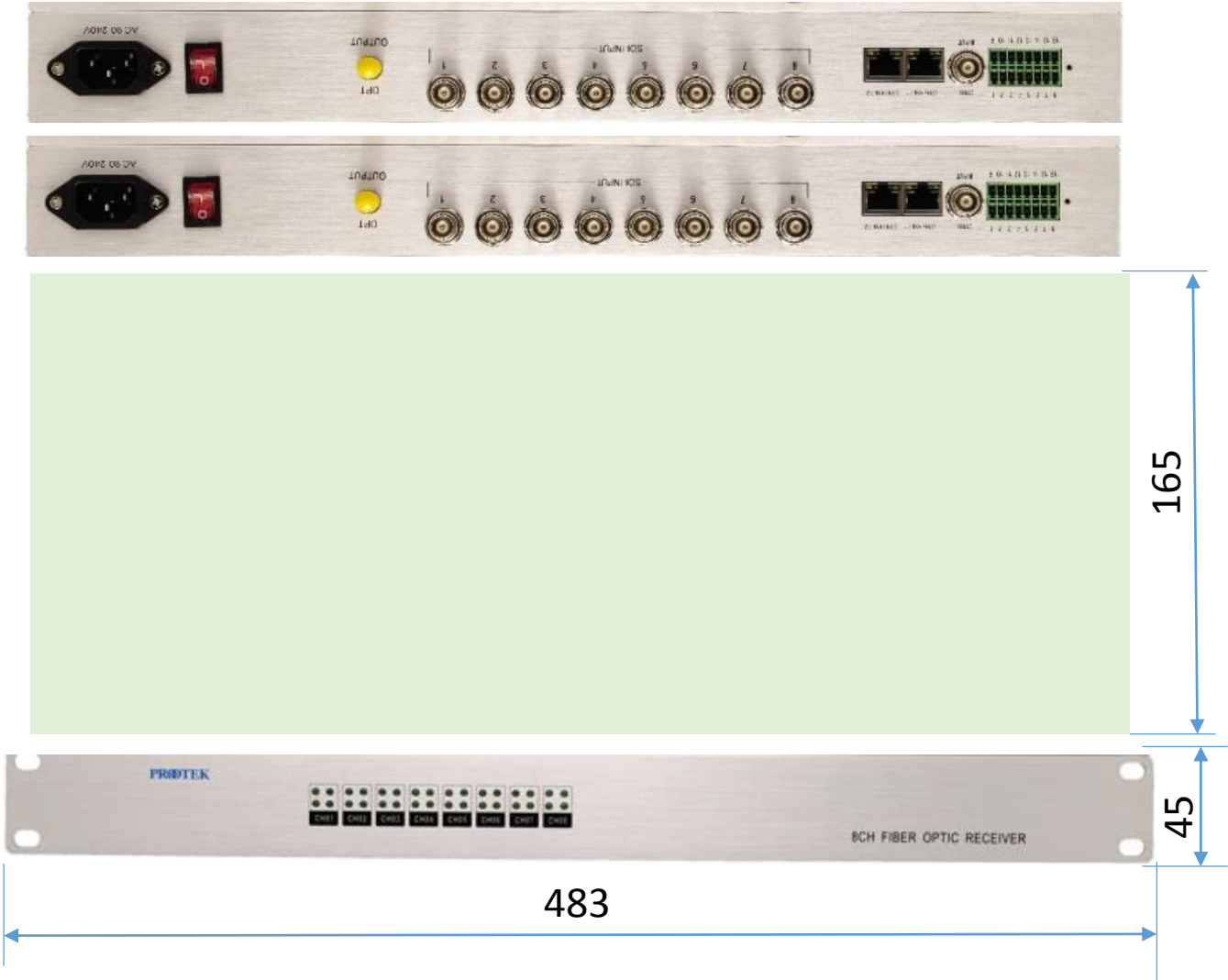
Model	POT-S08AHD-Tx/Rx-VD
HD-SDI	
Video Input	8 BNC, 75Ω unbalanced
Video Output	8 BNC, 75Ω unbalanced
Signal Level	800mVp-p ±10%
Overshoot	10%
Video Format	SD-SDI, HD-SDI, 3G-SDI(Option)
Multi-format Rate	SMPTE-259M/292M/424M/DVD-ASI
Data Rate	143M, 177M, 270M, 360M, 540M, 1485M, 2970M
Video Format	SD 525i/625i HD 720p24, 25/30, 50/60 HD 1080i, 50/60 HD 1080p24, 25/30, 50/60
Video Coding	8bit, 10bit, 12bit Auto
Return Loss	≤ -15dB @ 5MHz ~ 1.5gHz
Retiming	Auto
Balance mode	Auto
Coupling Mode	AC Coupling
Rise/Fall time	≥0.4ns, ≤ 1.50ns@270MBPS, Difference less than 0.5ns ≤ 270ps @1.485Gbps, Difference less than 100ps ≤ 135ps @2.97Gbps, Differeace less than 50ps
Alignment Jitter(100KHz)	≤ 0.2UI@270Mbps, at 1KHz ≤ 0.1UI@1.485Gbps, at 100KHz ≤ 0.3UI@2.97Gbps, at 100KHz
Timing Jitter(10Hz)	≤ 0.2UI@270Mbps ≤ 1.0UI@1.485Gbps ≤ 2.0UI@2.97Gbps
Equalization(1694A)	>400m , SD-SDI / >200m, HD-SDI, >100m 3G-SDI
Embaded Audio	Support(Streo Analog audio or AES/EBU digital audio)
Alanog Video	
Vido Input	1 BNC, 75Ω unbalanced
Video Output	1 BNC, 75Ω unbalanced
Signal Level	1Vp-p/CVBS
Video Format	PAL/NTSC/SECAM

Model	POT-S08AHD-Tx/Rx-VD
Data	
Data port	RS-232/RS-485/RS-422 (Selece two)
Data Rate	Manchester, Bi-phase
Data Format	RS232:DC~115.2kbps, RS-422/485:DC~500kbps
Working mode	Simplex, half duplex or full duplex
Signal Level	0.25Vp-p ~ 10Vp-p
Bit Error Rate	< 10 ⁻⁹
Network	
Interface	RJ45, 2port
Standard & Rate	IEEE802.3u, 10Base-T 10/100M Ethernet
Working mode	Full duplex
Audio	
Port Number	2-Ch, duplex Analog Audio
Input /Output Level	2Vp-p/1.5Vp-p
Signal Impedance	10KΩ (unbalanced)
Bandwidth	50Hz~13KHz
Distortion	<1%
S/N ratio	>70dB
Alarm	
Port Number	2Groups
Neteork Management	SNMP Support
Optic	
No. of fiber	1
Optic Connector	ST/PC or FC/PC
Wave Length	1310/1350/1370/1390/1470/1490/1550/1570/1590/1610nm, WDM
Distance	40Km(Option : 20~60Km)
Operating Temperature	-40°C ~ 75°C
Power	12VDC±10%, Max100W
Case Size	112x144x50.8mm
Status Indicator	Power, SDI, Video, Audio, Data, Optical Link
MTBF	100,000Hr

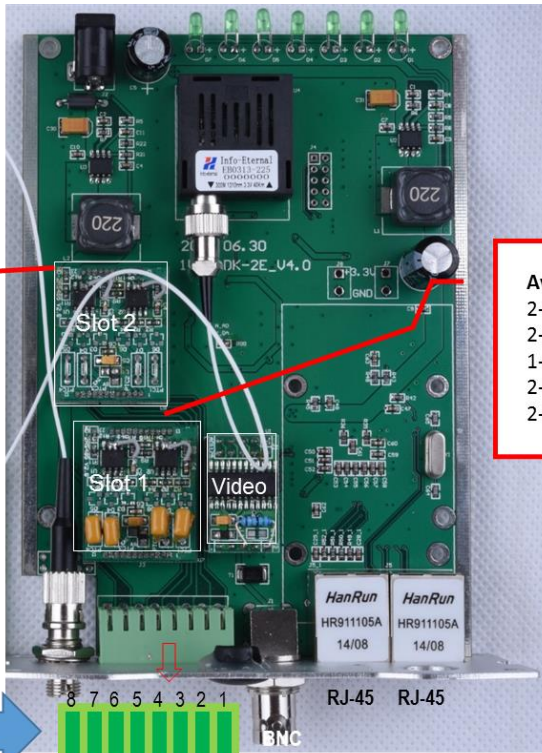
DIMENSIONS

POT-S08AHD-40KM-Tx/Rx-VD

Unit : mm

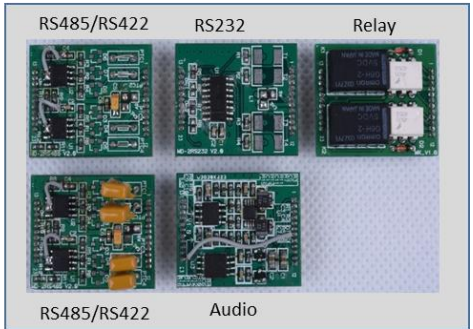
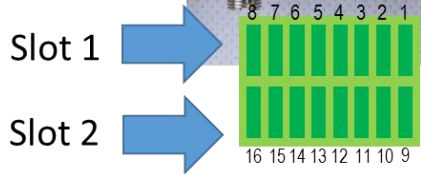


Connection Diagram of Multi Function Fiber Optic Transmitter

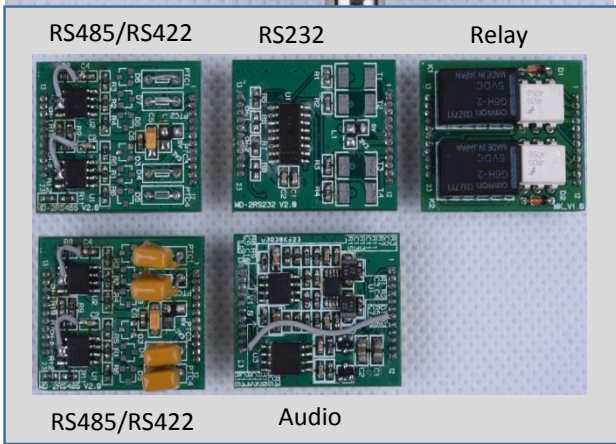


- Available Card Modules(Select 1)**
- 2-Channel RS-232
 - 2-Channel RS-485
 - 1-Channel RS-422
 - 2-Channel Duplex Audio
 - 2-Channel Alarm

- Available Card Modules(Select 1)**
- 2-Channel RS-232
 - 2-Channel RS-485
 - 1-Channel RS-422
 - 2-Channel Duplex Audio
 - 2-Channel Alarm



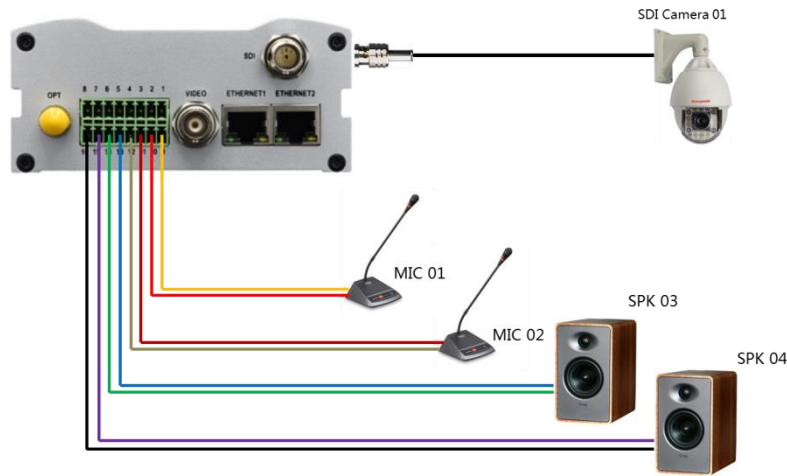
Multi-Function Performance



Network	
Interface	RJ45, 2port
Standard & Rate	IEEE802.3u, 10Base-T 10/100M Ethernet
Working mode	Full duplex
Analog Video	
Vido Input	1 BNC, 75Ω unbalanced
Video Output	1 BNC, 75Ω unbalanced
Signal Level	1Vp-p/CVBS
Video Format	PAL/NTSC/SECAM
Audio	
Port Number	2-Ch, duplex Analog Audio
Input /Output Level	2Vp-p/1.5Vp-p
Signal Impedance	10KΩ (unbalanced)
Bandwidth	50Hz~13KHz
Distortion	<1%
S/N ratio	>70dB
Data	
Data port	RS-232/RS-485/RS-422 (Selece two)
Data Rate	Manchester, Bi-phase
Data Format	RS232:DC~115.2kbps, RS-422/485:DC~500kbps
Working mode	Simplex, half duplex or full duplex
Signal Level	0.25Vp-p ~ 10Vp-p
Bit Error Rate	< 10 ⁻⁹
Alarm	
Port Number	2Groups

Multi Function Fiber Optic Transmitter

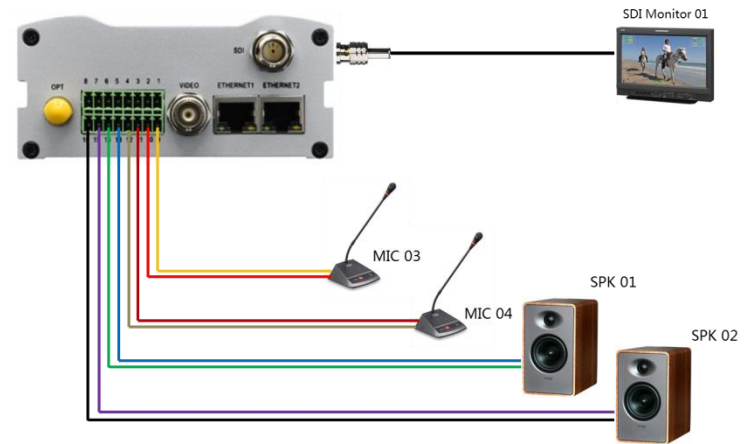
- Two Way Audio Connection Diagram -



TX

Slot Interface

Slot	Pin	Name	Description	Slot	Pin	Name	Description
Slot 1	1	In	Mic 01	Slot 2	9	In	Mic 01
	2	Ground	Mic 01		10	Ground	Mic 01
	3	In	Mic 02		11	In	Mic 02
	4	Ground	Mic 02		12	Ground	Mic 02
	5	Out	Speaker 03		13	Out	Speaker 03
	6	Ground	Speaker 03		14	Ground	Speaker 03
	7	Out	Speaker 04		15	Out	Speaker 04
	8	Ground	Speaker 04		16	Ground	Speaker 04



RX

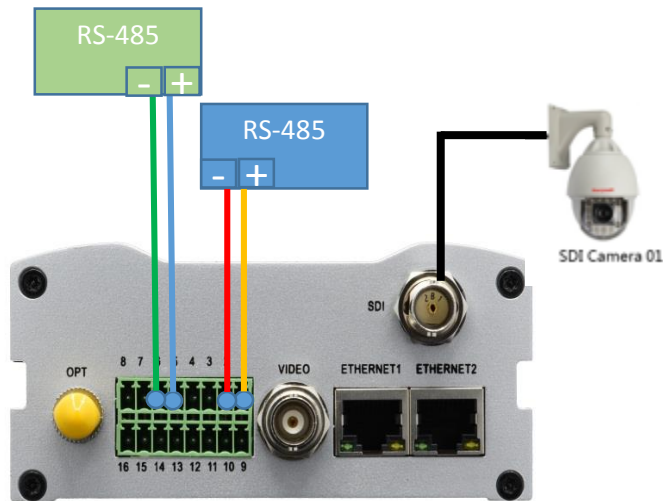
Slot Interface

Slot	Pin	Name	Description	Slot	Pin	Name	Description
Slot 1	1	In	Mic 03	Slot 2	9	In	Mic 03
	2	Ground	Mic 03		10	Ground	Mic 03
	3	In	Mic 04		11	In	Mic 04
	4	Ground	Mic 04		12	Ground	Mic 04
	5	Out	Speaker 01		13	Out	Speaker 01
	6	Ground	Speaker 01		14	Ground	Speaker 01
	7	Out	Speaker 02		15	Out	Speaker 02
	8	Ground	Speaker 02		16	Ground	Speaker 02

(40K

Multi Function Fiber Optic Transmitter

- Two RS-485 Connection Diagram -

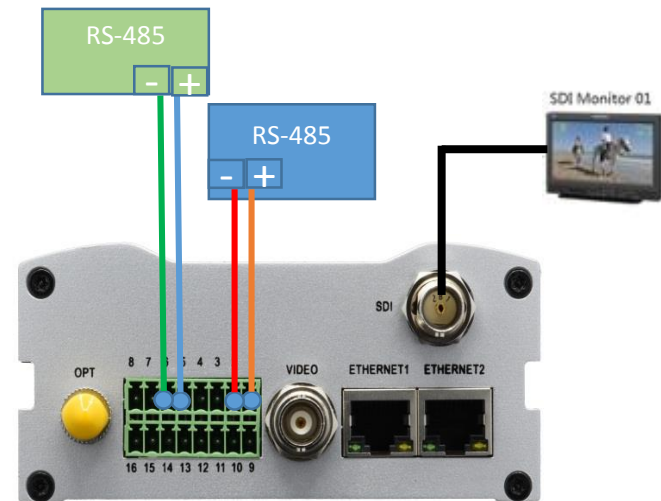


TX

Slot Interface

Slot	Pin	Name	Description
Slot 1	1	Data +	Positive of Device 1
	2	Data -	Negative of Device 1
	5	Data +	Positive of Device 2
	6	Data -	Negative of Device 2
Slot 2	9	Data +	Positive of Device 3
	10	Data -	Negative of Device 3
	13	Data +	Positive of Device 4
	14	Data -	Negative of Device 4

Single Mode(40Km)



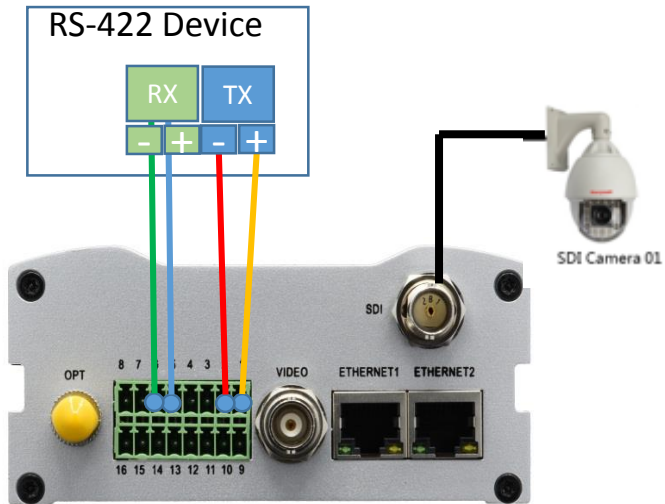
RX

Slot Interface

Slot	Pin	Name	Description
Slot 1	1	Data +	Positive of Device 1
	2	Data -	Negative of Device 1
	5	Data +	Positive of Device 2
	6	Data -	Negative of Device 2
Slot 2	9	Data +	Positive of Device 3
	10	Data -	Negative of Device 3
	13	Data +	Positive of Device 4
	14	Data -	Negative of Device 4

Multi Function Fiber Optic Transmitter

- RS-422 Connection Diagram -

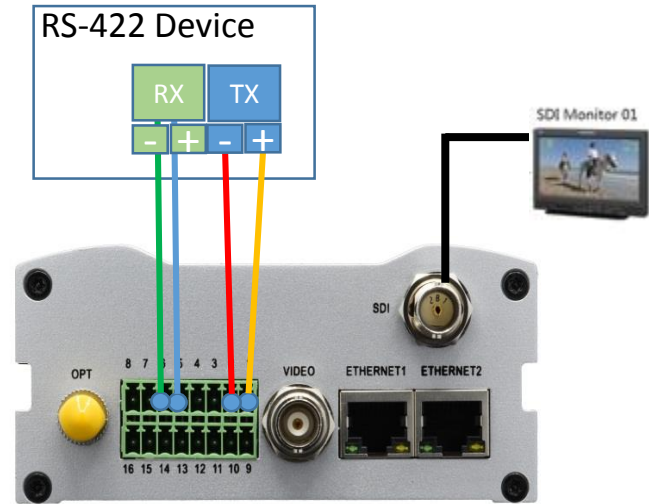


TX

Slot Interface

Slot	Pin	Name	Description
Slot 1	1	Rx +	Receive Data +
	2	Rx -	Receive Data -
	5	Tx +	Transmit Data +
	6	Tx -	Transmit Data -
Slot 2	9	Rx +	Receive Data +
	10	Rx -	Receive Data -
	13	Tx +	Transmit Data +
	14	Tx -	Transmit Data -

Single Mode(40Km)



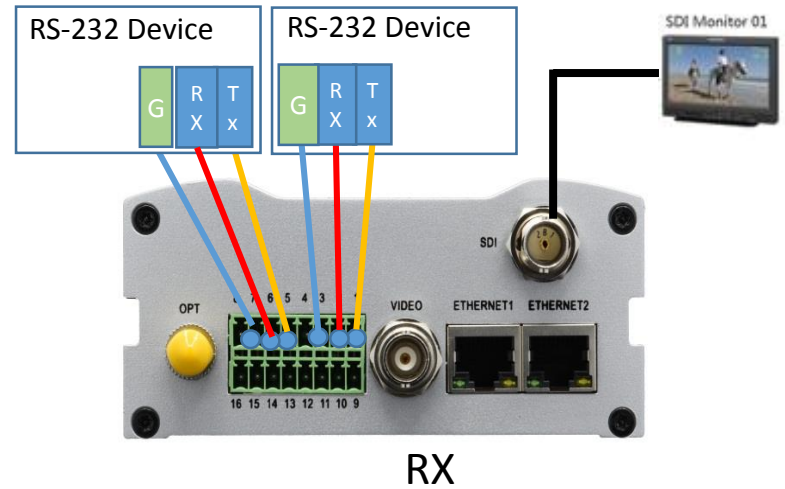
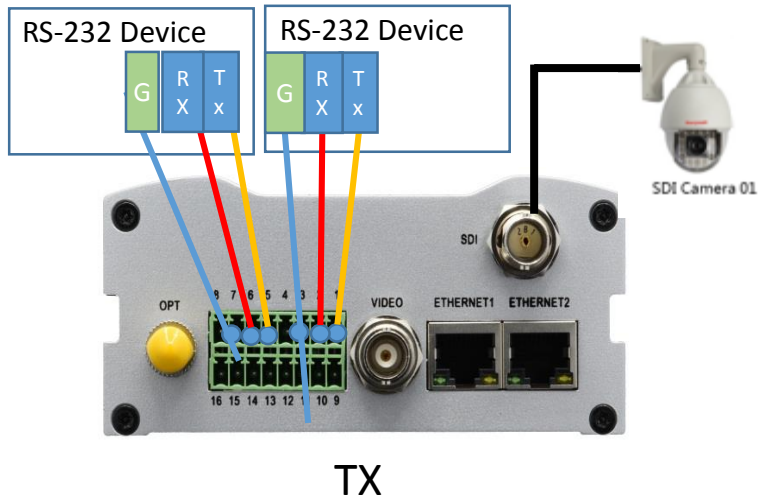
RX

Slot Interface

Slot	Pin	Name	Description
Slot 1	1	Rx +	Receive Data +
	2	Rx -	Receive Data -
	5	Tx +	Transmit Data +
	6	Tx -	Transmit Data -
Slot 2	9	Rx +	Receive Data +
	10	Rx -	Receive Data -
	13	Tx +	Transmit Data +
	14	Tx -	Transmit Data -

Multi Function Fiber Optic Transmitter

- Two RS-232 Connection Diagram -



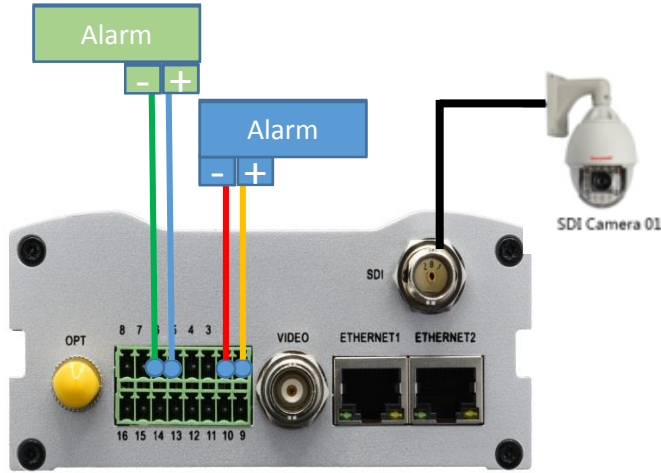
Slot	Pin	Name	Description
Slot 1	1	Rx	Receiver Data
	2	Tx	Transmit Data
	3	GND	Ground
	5	Rx	Receiver Data
	6	Tx	Transmit Data
	7	GND	Ground
	Slot 2	9	Rx
10		Tx	Transmit Data
11		GND	Ground
13		Rx	Receiver Data
14		Tx	Transmit Data
15		GND	Ground

Single Mode(40Km)

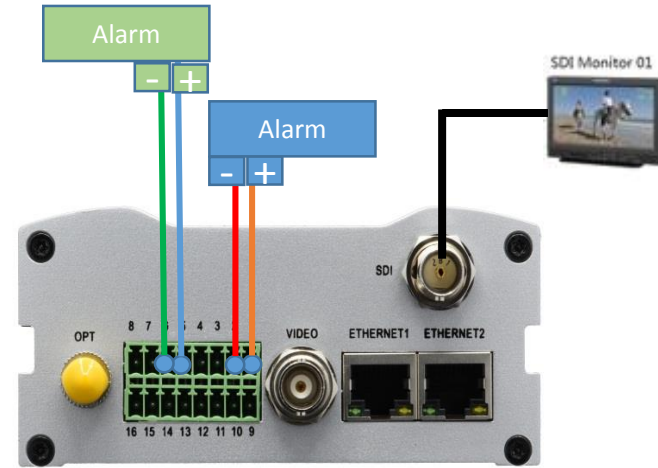
Slot	Pin	Name	Description
Slot 1	1	Rx	Receiver Data
	2	Tx	Transmit Data
	3	GND	Ground
	5	Rx	Receiver Data
	6	Tx	Transmit Data
	7	GND	Ground
	Slot 2	9	Rx
10		Tx	Transmit Data
11		GND	Ground
13		Rx	Receiver Data
14		Tx	Transmit Data
15		GND	Ground

Multi Function Fiber Optic Transmitter

- Two Alarm Connection Diagram -



TX



RX

Slot Interface

Slot	Pin	Name	Description
Slot 1	1	Sensor	Signal of Sensor 1
	2	GND	Ground of Sensor 1
	5	Sensor	Signal of Sensor 2
	6	GND	Ground of Sensor 2
Slot 2	9	Sensor	Signal of Sensor 3
	10	GND	Ground of Sensor 3
	13	Sensor	Signal of Sensor 4
	14	GND	Ground of Sensor 4

Single Mode(40Km)

Slot Interface

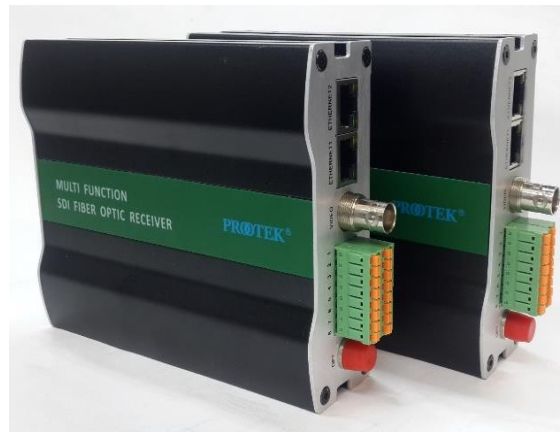
Slot	Pin	Name	Description
Slot 1	1	Sensor	Signal of Sensor 1
	2	GND	Ground of Sensor 1
	5	Sensor	Signal of Sensor 2
	6	GND	Ground of Sensor 2
Slot 2	9	Sensor	Signal of Sensor 3
	10	GND	Ground of Sensor 3
	13	Sensor	Signal of Sensor 4
	14	GND	Ground of Sensor 4

Multi Function Fiber Optic Transmitter over single fiber optic

POT-S01A-20KM-Tx/Rx-VD

- 2 RJ45 Ethernet(10/100 Ethernet)
 - Ethernet to Fiber Optic
 - Auto MDI/MDI-X Function

- 1 Analog Video (CVBS)
 - Analog Video to Fiber Optic
 - NTSC/PAL/SECOM



- RS-232 to Fiber Optic
- RS-485/422 to Fiber Optic
- Full duplex Analog Audio to Fiber Optic
 - Input : 10K Ω (unbalanced)
- Closure Contact to Fiber Optic

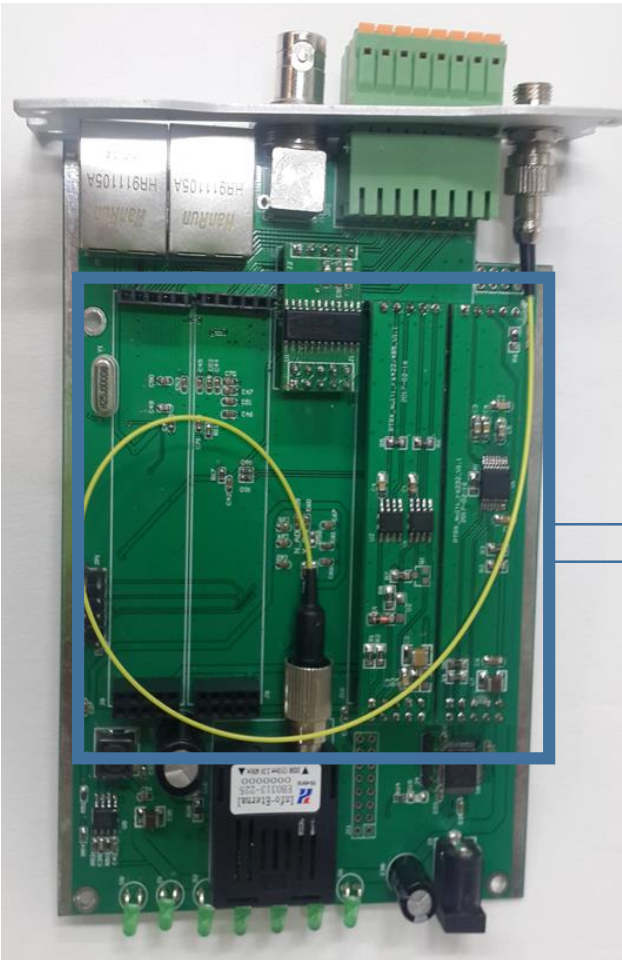
Multi Function Fiber Optic Transmitter

POT-S01A-20KM-Tx/Rx-VD



Multi Function Fiber Optic Transmitter

POT-S01A-20KM-Tx/Rx-VD



4 Slot for Data, Audio & Alarm Transmission

Model	POT-S01A-20KM-Tx/Rx-VD	Model	POT-S01A-20KM-Tx/Rx-VD
Analog Video		Data Board	
Video Input	1 BNC, 75Ω unbalanced	Data port	RS-232/RS-485/RS-422 (Selecte two)
Video Output	1 BNC, 75Ω unbalanced	Data Rate	Manchester, Bi-phase
Signal Level	1Vp-p/CVBS	Data Format	RS232:DC~115.2kbps, RS-422/485:DC~500kbps
Video Format	PAL/NTSC/SECAM	Working mode	Simplex, half duplex or full duplex
Network		Signal Level	0.25Vp-p ~ 10Vp-p
Interface	RJ45, 2port	Bit Error Rate	< 10 ⁻⁹
Standard & Rate	IEEE802.3u, 10Base-T 10/100M Ethernet	Audio Board	
Working mode	Full duplex	Port Number	2-Ch, duplex Analog Audio
		Input /Output Level	2Vp-p/1.5Vp-p
		Signal Impedance	10KΩ (unbalanced)
		Bandwidth	50Hz~13KHz
		Distortion	<1%
		S/N ratio	>70dB
		Alarm Board	
		Port Number	2Groups
		Neteork Management	
		SNMP Support	
		Optic	
		No. of fiber	1
		Optic Connector	ST/PC or FC/PC
		Wave Length	1310/1350/1550nm, WDM
		Distance	40Km(Option : 20~60Km)
		Operating Temperature	-40°C ~ 75°C
		Power	12VDC±10%, Max10W
		Case Size	112x144x50.8mm
		Status Indicator	Power, SDI, Video, Audio, Data, Optical Link
		MTBF	100,000Hr

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