

# DA-LP1101R/T

## Architectural and Engineering Specifications

Version 1.0  
(Mar. 30, 2017)

## PART 2 - PRODCUTS

### Division 27 – Communications

#### Section 27.16.16 – Communications Media Converters, Adapters, and Transceivers

##### 2.1.0 Manufacturer

1. IDIS Co., Ltd.  
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##### 2.2.0 General

###### 2.2.1 Product Description

DA-LP1101R/T is a long distance networking-specific solution that supports Ethernet connections up to 500 meters. This versatile connector empowers integrators and end users to establish networks beyond the limitations of common cables requiring repeater connections every 100 meters. By connecting a network video recorder (NVR) and camera with the IDIS Long Reach PoE Extender, users can now build a network without multiple separate repeater connections, enabling cost savings and simplifying network environments.

###### 2.2.2 General Specification

1. The device shall be equipped with 1 RJ-45 PD (Powered Device) and 1 RJ-45 PSE (Power Sourcing Equipment).
2. The device shall be equipped with RJ-45, auto-MDI/MDI-X sensing connectivity.
3. The device shall support up to 30W PoE.(Depending on cable distance and power input)
4. The device shall support up to 30W PoE power budget.
5. The device shall be equipped with 10/100/1000 Base-T(DA-LP1101R), RJ-45 Ethernet connection.
6. The device shall support up to 500m PoE transmission between devices using UTP cabling.
7. The device shall support up to 700m data transmission between equipment using UTP cabling.
8. The device shall support plug-and-play without any required PC settings.
9. The device shall support 1Gbps / IEEE802.3at for PoE Injector. (DA-LP1101R)
10. The device shall support 1Gbps / IEEE802.3at / 100 meters for PoE Repeater. (DA-LP1101R)

##### 2.3.0 Technical Specification

###### 2.3.1 Specification of DA-LP1101R operated as PoE Injector or PoE Repeater

1. Port
  - A. RJ-45 x 1 with PD
  - B. RJ-45 x 1 with PSE

2. Connectivity: RJ-45, Auto-MDI/MDI-X Sensing
3. Power Input: IEEE 802.3at, 48 ~ 56V DC
4. Power Output: Max. 720mA
5. PoE Standard
  - A. IEEE 802.3at PD
  - B. IEE 802.3at PSE
6. PSE Budget: Up to 30W
7. Speed: 10/100/1000Mbps

### 2.3.2 Specification of DA-LP1101R/T operated as Long Reach PoE Extender

1. Port
  - A. RJ-45 x 1 with PD
  - B. RJ-45 x 1 with PSE
2. Connectivity: RJ-45, Auto-MDI/MDI-X Sensing
3. Power Input: IEEE 802.3at, 48 ~ 56 V DC
4. Power Output: Max. 720mA
5. PoE Standard
  - A. IEEE 802.3at PD
  - B. IEE 802.3at PSE
6. PoE Budget: Up to 30W (Depending on Cable Distance and Power Input)
7. Wire type: UTP CAT5E or Above
8. Speed: 10/100Mbps

### 2.3.3 LEDs and Button

1. Link status LED: 2 Yellow LED (Link / Activity LED per Ethernet Port)
2. PoE Status: 1 Green LED (PSE LED)
3. Reset Button: None
4. Power LED: 1 Green LED

### 2.4.0 Mechanical Specifications

1. Unit Dimensions (W x H x D): 102 mm x 34 mm x 96 mm (4.01" x 1.33" x 3.77")
2. Unit Weight: 226g ( 0.49lb)

### 2.5.0 Environmental Specifications

1. Working Temperature: -10°C to 50°C (14°F ~ 122°F)
2. Operating Humidity: 0% ~ 90%

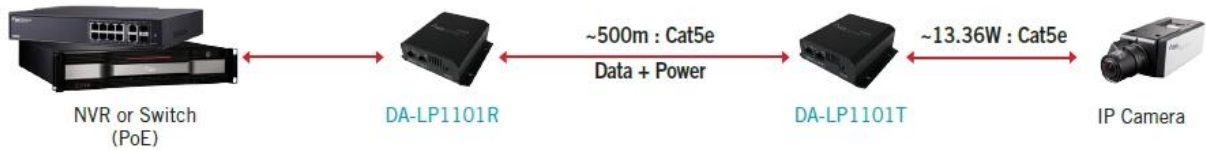
## 2.6.0 Electrical Specifications

1. Regulatory Approvals:
  - A. Electrical: KC, CE, FCC
2. PoE Output Capability

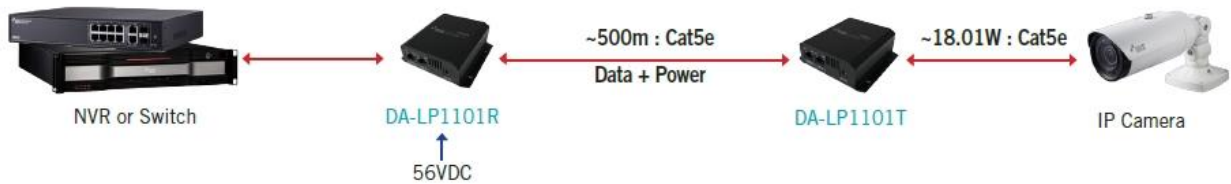
Distance	Data Rate	DA-LP1101T IEEE802.3at PoE Output Capability (Using UTP CAT5E Cable)		
		DA-LP1101R with IEEE 802.3at	DA-LP1101R with 56V DC Input	DA-LP1101T with 56V DC Input
100m	100Mbps	19.65W	27.80W	30.68W
200m	100Mbps	18.28W	25.57W	30.68W
300m	100Mbps	16.81W	23.24W	30.68W
400m	100Mbps	16.00W	20.85W	30.68W
500m	100Mbps	13.36W	18.01W	30.68W
600m	100Mbps			30.68W
700m	100Mbps			30.68W

## Appendix. A IDIS Long Reach PoE Installation

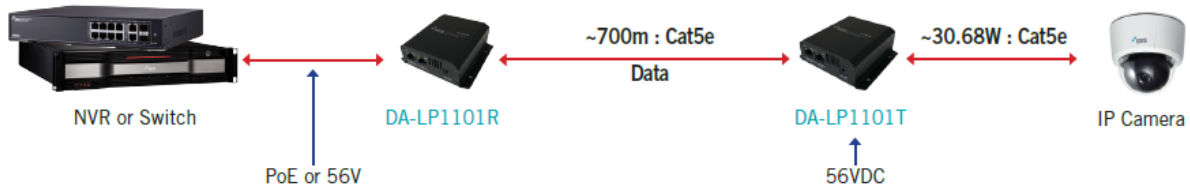
### 1. Installation with PoE NVR or Switch



### 2. Installation with External DC Power (DA-LP1101R)



### 3. Installation with External DC Power (DA-LP1101T)



### 4. Installation for PoE Repeater



### 5. Installation for PoE Injector



## Version History

Version	Writer	Revision Date	Remarks
1.0	Brandon Jo	Mar. 30, 2017	Initial Release