

### DW642T

Rugged Design Industrial 4 port POE injector, with 4 x 10/100M TX PSE(IEEE802.3at POE+), 2 x 10/100M TX, 48VDC Power input, Operating temp: -40°C to +75°C

### Models available:

DW642TSC 4 port 10/100M POE+ Injector, with

4x10/100MTX PSE(POE+), 10/100TX,

100M SC

DW642TSC-30 4 port 10/100M POE+ Injector, with

4x10/100MTX PSE(POE+), 10/100TX,

100M SC SM 30km

DW642SC 4 port 10/100M POE+ Injector, with

4x10/100MTX PSE(POE+), + 2 x 100M

SC

DW642SC-30 4 port 10/100M POE+ Injector, with

4x10/100MTX PSE(POE+), + 2 x 100M

SC SM 30km

DW541T 4 port 10/100M POE+ Injector, with

4x10/100MTX PSE(POE+), + 10/100TX

ST, WDM fibers are also available



**DW642T** 

### Introduction

This rugged designed high power 4 port industrial POE+ Injector is equipped with our high efficiency ColdDesign technology which allows input voltage to meet IEEE802.3af/at standard, also reduce the excessive heat problem to a minimum. And it is also equipped with 2 ports 100M fiber(optional models) that can be used as fiber redundancy, cascaded to your other devices to expand your network application. It is being rigorously tested for your Security, Transportation and Telco application.



# **Specification**

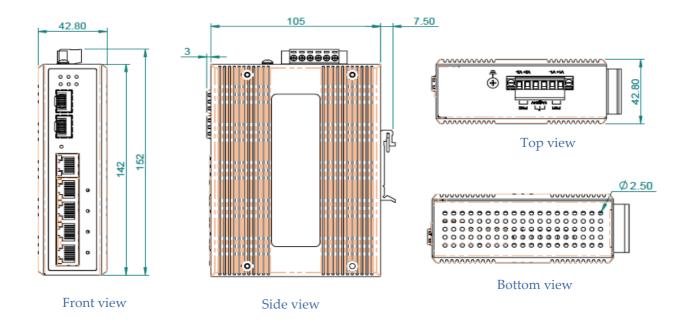
IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE802.3a flow Control and Back Pressure, IEEE802.3a flor POE IEEE802.3a for POE IEEE802.3a for POE  Switch Architecture Back-plane (Switching Fabric): 1.2Gbps  Data Processing Store and Forward  Flow Control: IEEE 802.3x Flow Control and Back Pressure  Jumbo Frame 9KB  MAC address Table Size 1K  Packet Buffer Size 1M  Network Connector:  UTM  SWITCH AUTO M POE+ 802.3at/af PSE port Auto MDI/MDI-X function, Full/Half duplex 2 x 10/100BaseT, UTP/STP above Cat.5e Cable EIA/TIA-568 100-ohm (100m) Fiber Cable (Single-mode): 9/125um  Protocol  CSMA/CD  PW1(Power 1) Green, PW2(Power 2) Green, ERR( Fault ) Amber, TX/RJ-45 port: LNK (Link/Active) Green, SPD(Speed) 10/100(OFF), 1000 (Green) Fiber Per port: Link (Green) Active Flash POE port ON/OFF  Reserve polarity protection Overload current protection Present  Redundant Dual DC 12V-55V Power Input, 44VDC-55VDC for POE		IEEE 802.3 10Base-T Ethernet
IEEE Standard	IEEE Standard	
IEEE 802.3x Flow Control and Back Pressure, IEEE802.3af for POE   IEEE802.3x Flow Control   IEEE 802.3x Flow Control and Back Pressure   IEEE 802.3x Flow Cont		
IEEE802.3af for POE   IEEE802.3at for POE   IEEE802.3at for POE   IEEE802.3at for POE		
Back-plane (Switching Fabric): 1.2Gbps		, and the second
Store and Forward		IEEE802.3at for POE+
Flow Control:  Jumbo Frame  MAC address Table Size  Packet Buffer Size  IM     6xRJ-45 10/100BaseT(X) auto negotiation, 4 10/100M POE+ 802.3at/af PSE port Auto MDI/MDI-X function, Full/Half duplex 2 x 10/100BaseT,    UTP/STP above Cat.5e Cable     EIA/TIA-568 100-ohm (100m)     Fiber Cable (Multi-mode):50/125um,62.5/125um     Fiber Cable (Single-mode): 9/125um     Protocol   CSMA/CD     PW1(Power 1) Green, PW2(Power 2) Green,     ERR( Fault ) Amber,     TX/RJ-45 port: LNK (Link/Active) Green,     SPD(Speed) 10/100(OFF),1000 (Green)     Fiber Per port: Link (Green)     Active Flash     POE port ON/OFF     Reserve polarity protection     Present     Power Supply     Redundant Dual DC 12V-55V Power Input,	Switch Architecture	Back-plane (Switching Fabric): 1.2Gbps
MAC address Table Size   1K	Data Processing	Store and Forward
MAC address Table Size         1K           Packet Buffer Size         1M           6xRJ-45 10/100BaseT(X) auto negotiation, 4 10/100M POE+ 802.3at/af PSE port Auto MDI/MDI-X function, Full/Half duplex 2 x 10/100BaseT, UTP/STP above Cat.5e Cable EIA/TIA-568 100-ohm (100m) Fiber Cable (Multi-mode):50/125um,62.5/125um Fiber Cable (Single-mode): 9/125um           Protocol         CSMA/CD           PW1(Power 1) Green, PW2(Power 2) Green, ERR( Fault ) Amber, TX/RJ-45 port: LNK (Link/Active) Green, SPD(Speed) 10/100(OFF),1000 (Green)           LED         LNK (Link/Active) Green, SPD(Speed) 10/100(OFF),1000 (Green)           Fiber Per port: Link (Green) Active Flash POE port ON/OFF           Reserve polarity protection         Present           Overload current protection         Present           Power Supply         Redundant Dual DC 12V-55V Power Input,	Flow Control:	IEEE 802.3x Flow Control and Back Pressure
Packet Buffer Size    IM	Jumbo Frame	9KB
Network Connector:    6xRJ-45 10/100BaseT(X) auto negotiation, 4 10/100M POE+ 802.3at/af PSE port Auto MDI/MDI-X function, Full/Half duplex 2 x 10/100BaseT,    UTP/STP above Cat.5e Cable     EIA/TIA-568 100-ohm (100m)     Fiber Cable (Multi-mode):50/125um,62.5/125um     Fiber Cable (Single-mode): 9/125um     Protocol   CSMA/CD     PW1(Power 1) Green, PW2(Power 2) Green,     ERR( Fault ) Amber,     TX/RJ-45 port:     LNK (Link/Active) Green,     SPD(Speed) 10/100(OFF),1000 (Green)     Fiber Per port:     Link (Green)     Active Flash     POE port ON/OFF     Reserve polarity protection   Present     Power Supply     Redundant Dual DC 12V-55V Power Input,	MAC address Table Size	1K
Network Connector:  4 10/100M POE+ 802.3at/af PSE port Auto MDI/MDI-X function, Full/Half duplex 2 x 10/100BaseT,  UTP/STP above Cat.5e Cable EIA/TIA-568 100-ohm (100m)  Fiber Cable (Multi-mode):50/125um,62.5/125um Fiber Cable (Single-mode): 9/125um  Protocol  CSMA/CD  PW1(Power 1) Green, PW2(Power 2) Green, ERR( Fault ) Amber,  TX/RJ-45 port: LNK (Link/Active) Green, SPD(Speed) 10/100(OFF),1000 (Green)  Fiber Per port: Link (Green) Active Flash POE port ON/OFF  Reserve polarity protection  Overload current protection  Present  Redundant Dual DC 12V-55V Power Input,	Packet Buffer Size	1M
Network Connector:  Auto MDI/MDI-X function, Full/Half duplex 2 x 10/100BaseT,  UTP/STP above Cat.5e Cable  EIA/TIA-568 100-ohm (100m)  Fiber Cable (Multi-mode):50/125um,62.5/125um Fiber Cable (Single-mode): 9/125um  Protocol  CSMA/CD  PW1(Power 1) Green, PW2(Power 2) Green, ERR( Fault ) Amber,  TX/RJ-45 port: LNK (Link/Active) Green, SPD(Speed) 10/100(OFF),1000 (Green)  Fiber Per port: Link (Green) Active Flash POE port ON/OFF  Reserve polarity protection  Overload current protection  Present  Redundant Dual DC 12V-55V Power Input,	Network Connector:	6xRJ-45 10/100BaseT(X) auto negotiation,
Auto MDI/MDI-X function, Full/Half duplex 2 x 10/100BaseT,  UTP/STP above Cat.5e Cable  EIA/TIA-568 100-ohm (100m)  Fiber Cable (Multi-mode):50/125um,62.5/125um Fiber Cable (Single-mode): 9/125um  Protocol  CSMA/CD  PW1(Power 1) Green, PW2(Power 2) Green, ERR( Fault ) Amber,  TX/RJ-45 port: LNK (Link/Active) Green, SPD(Speed) 10/100(OFF),1000 (Green)  Fiber Per port: Link (Green) Active Flash POE port ON/OFF  Reserve polarity protection  Overload current protection  Present  Redundant Dual DC 12V-55V Power Input,		4 10/100M POE+ 802.3at/af PSE port
Network Cable  EIA/TIA-568 100-ohm (100m)  Fiber Cable (Multi-mode):50/125um,62.5/125um Fiber Cable (Single-mode): 9/125um  Protocol  CSMA/CD  PW1(Power 1) Green, PW2(Power 2) Green, ERR( Fault ) Amber,  TX/RJ-45 port: LNK (Link/Active) Green, SPD(Speed) 10/100(OFF),1000 (Green)  Fiber Per port: Link (Green) Active Flash POE port ON/OFF  Reserve polarity protection  Overload current protection  Present  Redundant Dual DC 12V-55V Power Input,		Auto MDI/MDI-X function, Full/Half duplex
Network Cable  EIA/TIA-568 100-ohm (100m)  Fiber Cable (Multi-mode):50/125um,62.5/125um Fiber Cable (Single-mode): 9/125um  Protocol  CSMA/CD  PW1(Power 1) Green, PW2(Power 2) Green, ERR( Fault ) Amber,  TX/RJ-45 port: LNK (Link/Active) Green, SPD(Speed) 10/100(OFF),1000 (Green)  Fiber Per port: Link (Green) Active Flash POE port ON/OFF  Reserve polarity protection  Present  Power Supply  EIA/TIA-568 100-ohm (100m)  Fiber Cable (Multi-mode):50/125um,62.5/125um Fiber Cable (Multi-mode):50/125um,62.5/125um Fiber Cable (Multi-mode):50/125um Fiber Cable (Multi-mode):9/125um Fiber Cable (Multi-mode):9/		2 x 10/100BaseT,
Fiber Cable (Multi-mode):50/125um,62.5/125um Fiber Cable (Single-mode): 9/125um  CSMA/CD  PW1(Power 1) Green, PW2(Power 2) Green, ERR( Fault ) Amber,  TX/RJ-45 port: LNK (Link/Active) Green, SPD(Speed) 10/100(OFF),1000 (Green)  Fiber Per port: Link (Green) Active Flash POE port ON/OFF  Reserve polarity protection  Overload current protection  Present  Redundant Dual DC 12V-55V Power Input,		UTP/STP above Cat.5e Cable
Fiber Cable (Multi-mode):50/125um,62.5/125um Fiber Cable (Single-mode): 9/125um  CSMA/CD  PW1(Power 1) Green, PW2(Power 2) Green, ERR( Fault ) Amber,  TX/RJ-45 port: LNK (Link/Active) Green, SPD(Speed) 10/100(OFF),1000 (Green)  Fiber Per port: Link (Green) Active Flash POE port ON/OFF  Reserve polarity protection  Present  Overload current protection  Redundant Dual DC 12V-55V Power Input,	Network Cable	EIA/TIA-568 100-ohm (100m)
Protocol  CSMA/CD  PW1(Power 1) Green, PW2(Power 2) Green, ERR( Fault ) Amber,  TX/RJ-45 port: LNK (Link/Active) Green, SPD(Speed) 10/100(OFF),1000 (Green)  Fiber Per port: Link (Green) Active Flash POE port ON/OFF  Reserve polarity protection  Present  Overload current protection  Present  Redundant Dual DC 12V-55V Power Input,		Fiber Cable (Multi-mode):50/125um,62.5/125um
PW1(Power 1) Green, PW2(Power 2) Green, ERR( Fault ) Amber,  TX/RJ-45 port: LNK (Link/Active) Green, SPD(Speed) 10/100(OFF),1000 (Green)  Fiber Per port: Link (Green) Active Flash POE port ON/OFF  Reserve polarity protection  Present  Overload current protection  Redundant Dual DC 12V-55V Power Input,		Fiber Cable (Single-mode): 9/125um
PW2(Power 2) Green, ERR( Fault ) Amber,  TX/RJ-45 port: LNK (Link/Active) Green, SPD(Speed) 10/100(OFF),1000 (Green)  Fiber Per port: Link (Green) Active Flash POE port ON/OFF  Reserve polarity protection  Overload current protection  Present  Redundant Dual DC 12V-55V Power Input,	Protocol	CSMA/CD
LED  ERR( Fault ) Amber,  TX/RJ-45 port:  LNK (Link/Active) Green,  SPD(Speed) 10/100(OFF),1000 (Green)  Fiber Per port:  Link (Green)  Active Flash  POE port ON/OFF  Reserve polarity protection  Overload current protection  Present  Redundant Dual DC 12V-55V Power Input,		PW1(Power 1) Green,
LED  TX/RJ-45 port: LNK (Link/Active) Green, SPD(Speed) 10/100(OFF),1000 (Green)  Fiber Per port: Link (Green) Active Flash POE port ON/OFF  Reserve polarity protection Overload current protection  Present  Redundant Dual DC 12V-55V Power Input,	LED	PW2(Power 2) Green,
LNK (Link/Active) Green, SPD(Speed) 10/100(OFF),1000 (Green)  Fiber Per port: Link (Green) Active Flash POE port ON/OFF  Reserve polarity protection Overload current protection Present Redundant Dual DC 12V-55V Power Input,		ERR( Fault ) Amber,
SPD(Speed) 10/100(OFF ) ,1000 (Green)  Fiber Per port: Link (Green) Active Flash POE port ON/OFF  Reserve polarity protection  Present  Overload current protection  Present  Redundant Dual DC 12V-55V Power Input,		TX/RJ-45 port:
Fiber Per port: Link (Green) Active Flash POE port ON/OFF  Reserve polarity protection Present  Overload current protection Present  Redundant Dual DC 12V-55V Power Input,		, , , , , , , , , , , , , , , , , , ,
Link (Green) Active Flash POE port ON/OFF  Reserve polarity protection Present Overload current protection Present Redundant Dual DC 12V-55V Power Input,		SPD(Speed) 10/100(OFF),1000 (Green)
Active Flash POE port ON/OFF  Reserve polarity protection Present  Overload current protection Present  Redundant Dual DC 12V-55V Power Input,		Fiber Per port:
POE port ON/OFF  Reserve polarity protection Present  Overload current protection Present  Redundant Dual DC 12V-55V Power Input,		
Reserve polarity protection  Overload current protection  Present  Redundant Dual DC 12V-55V Power Input,		
Overload current protection Present  Redundant Dual DC 12V-55V Power Input,		POE port ON/OFF
Redundant Dual DC 12V-55V Power Input,	Reserve polarity protection	Present
Power Sunniv	Overload current protection	Present
44VDC-55VDC for POE	Power Supply	Redundant Dual DC 12V-55V Power Input,
		44VDC-55VDC for POE
Power Consumption 3.76W@48 VDC full load, Without POE	Power Consumption	3.76W@48 VDC full load, Without POE



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Alarm Relay Contact	Relay outputs with current carrying capacity of 1 A @24VDC,
	Relay in short circuit mode when 2 powers are
	connected. in open circuit mode when only one
	power supply is connected
POE power	POE power per port 30watts at 48VDC input
	Maximum total power 120Watts
Removable Terminal Block	Provide 2 Redundant power , Alarm relay
	contact ,6 Pin
	Wire range: 0.34mm^2 to 2.5mm^2
	Solid wire (AWG):12-24/14-22
	Stranded wire(AWG): 12-24/14-22
	Torque:5lb-In/0.5Nm/0.56Nm
	Wire Strip length: 7-8mm
<b>Operating Temperature</b>	-40°C~75°C fully tested.
POE efficiency	Voltage efficiency up to 97% from 48VDC to
	55VDC.
Surface temperature	Surface temperature rises 6°C full load in a 75°C
	chamber
<b>Operating Humidity</b>	5% to 95% (Non-condensing)
Storage Temperature	-40°C~85°C
MTBF (mean time between	1,510,304 hrs ( MIL-HDBK-217F) at 25°C
failure)	
Housing	Rugged Metal ,IP30 Protection
Case Dimension (W X D X H)	142mmx43mmx105mm (LxWxD)
Installation mounting	DIN Rail mounting and Wall Mounting
EMC/EMS	CE, FCC
EMI	FCC Part 15 Subpart B Class A,
	CE EN 55022 Class A



## **Housing Dimension**



### **Applications**

