

## MPSI RJ45 Modular Jacks with Magnetics & POE, 501-5200 Series:

**Order Code 501-4203 – 2x6 Port, 1G, POE++ 802.3bt Type 3 (60W), PCB TH, 90°, UL94V-0**



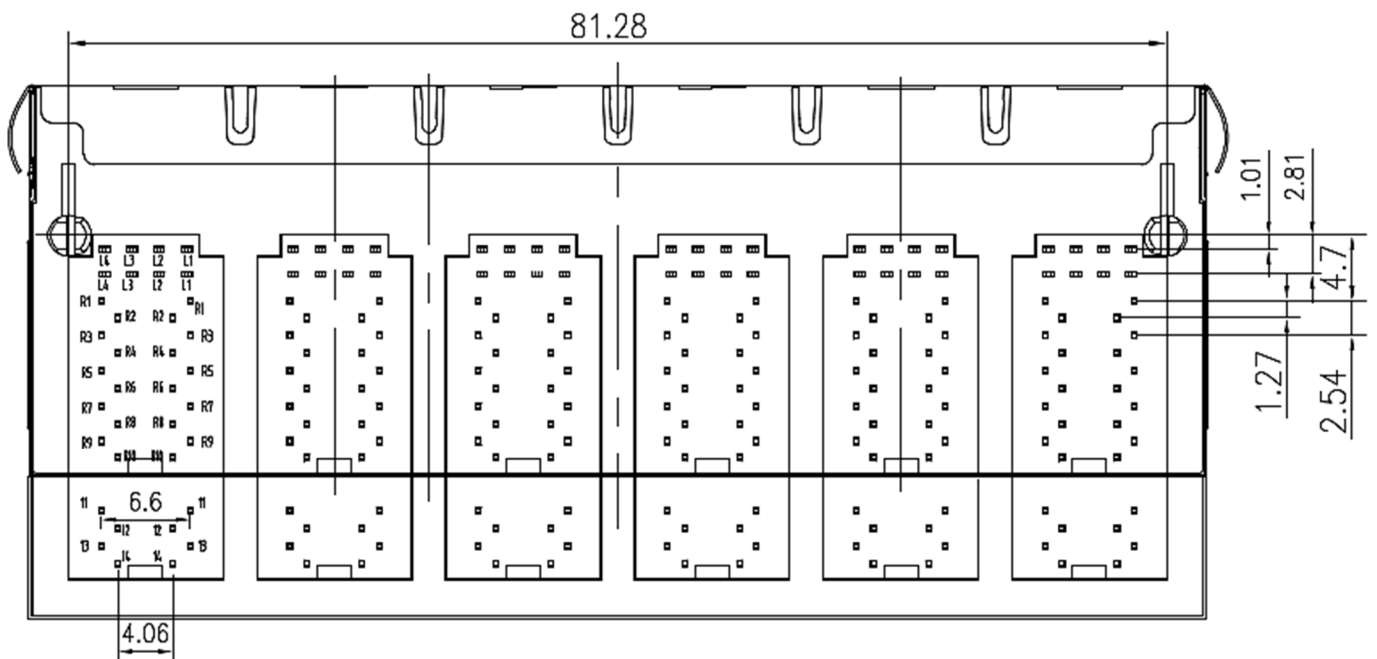
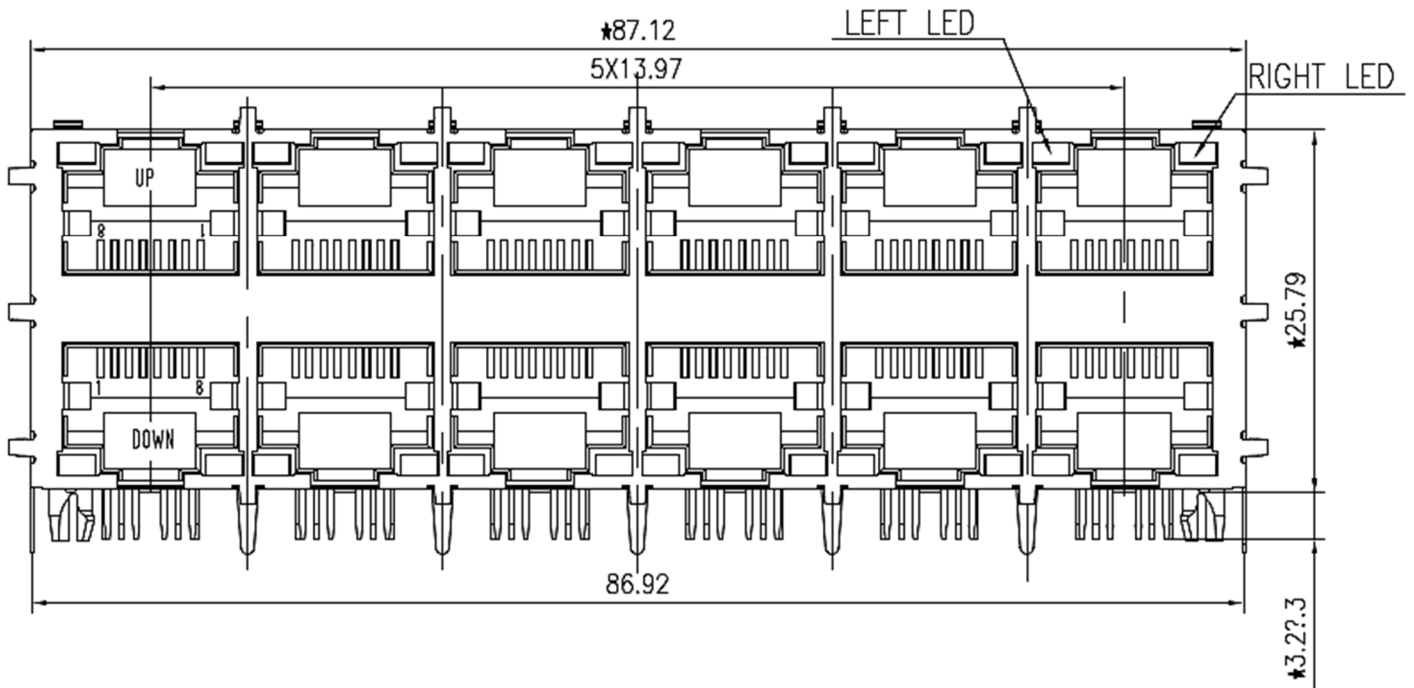
Images are for Illustrative Purposes Only

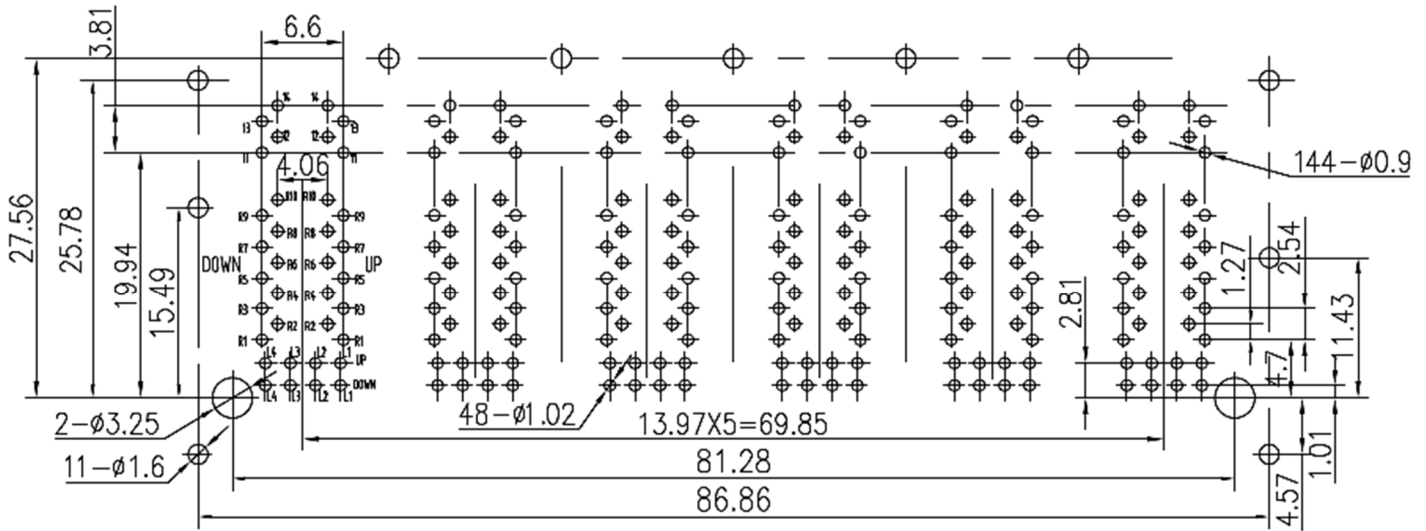
Gigabit (100/1000 Base-T) RJ45 MagJack with POE++.  
Meets IEEE 802.3bt POE++ Type 3 Specification.  
Specification: 60W, 1000mA, 58V. High Power.  
2x6 Port. LED Colours – See Options  
90° PCB Through-Hole Mount. Shielded with EMI Fingers.  
UL & RoHS Compliance.  
Available Options, see > **PART OPTIONS:**  
Contact Plating  
LED Colours

### > TECHNICAL SPECIFICATION

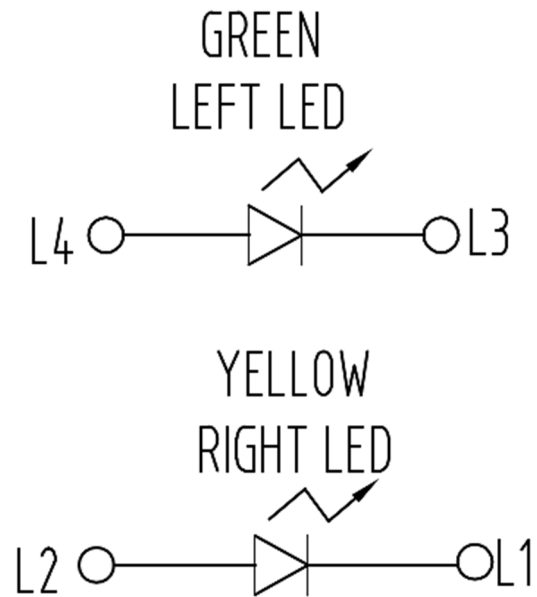
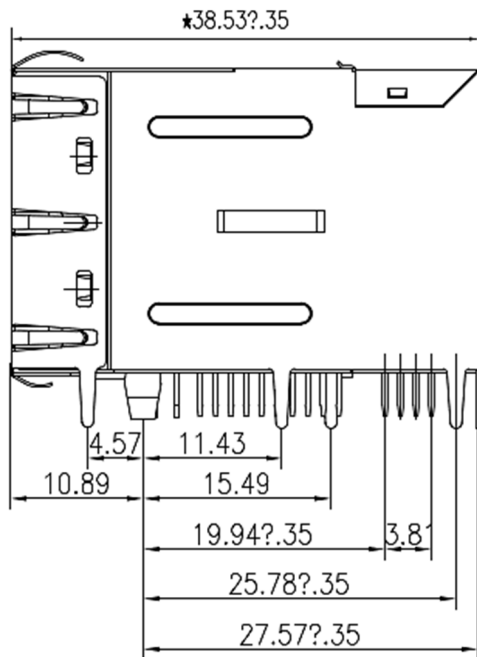
PRODUCT TYPE:	RJ45 MODULAR JACK WITH MAGNETICS
ETHERNET SPEED:	1000BASE-T GIGABIT
STANDARD:	IEEE 802.3bt POE++ TYPE 3
POWER DELIVERY:	60W
PORT CONFIGURATION:	2 x 6 PORTS
MOUNTING TYPE:	PCB THROUGH-HOLE
ORIENTATION:	90°
EMI FINGERS:	YES
INSULATOR (PLASTICS):	BLACK THERMOPLASTIC UL94V-0
CONTACT MATERIAL:	COPPER ALLOY
SHIELD MATERIAL:	COPPER ALLOY
CONTACT PLATING:	6U" GOLD IN CONTACT AREA
SHIELD PLATING:	NICKEL
RoHS COMPLIANT:	EU RoHS 2011/65/EU and EU 2015/863
OPERATING TEMPERATURE:	-40°C to +85°C
WAVE SOLDER TEMPERATURE:	265°C MAX (5 SECS)
DURABILITY:	800 MATING CYCLES MIN.

> PHYSICAL





PCB BOARD LAYOUT



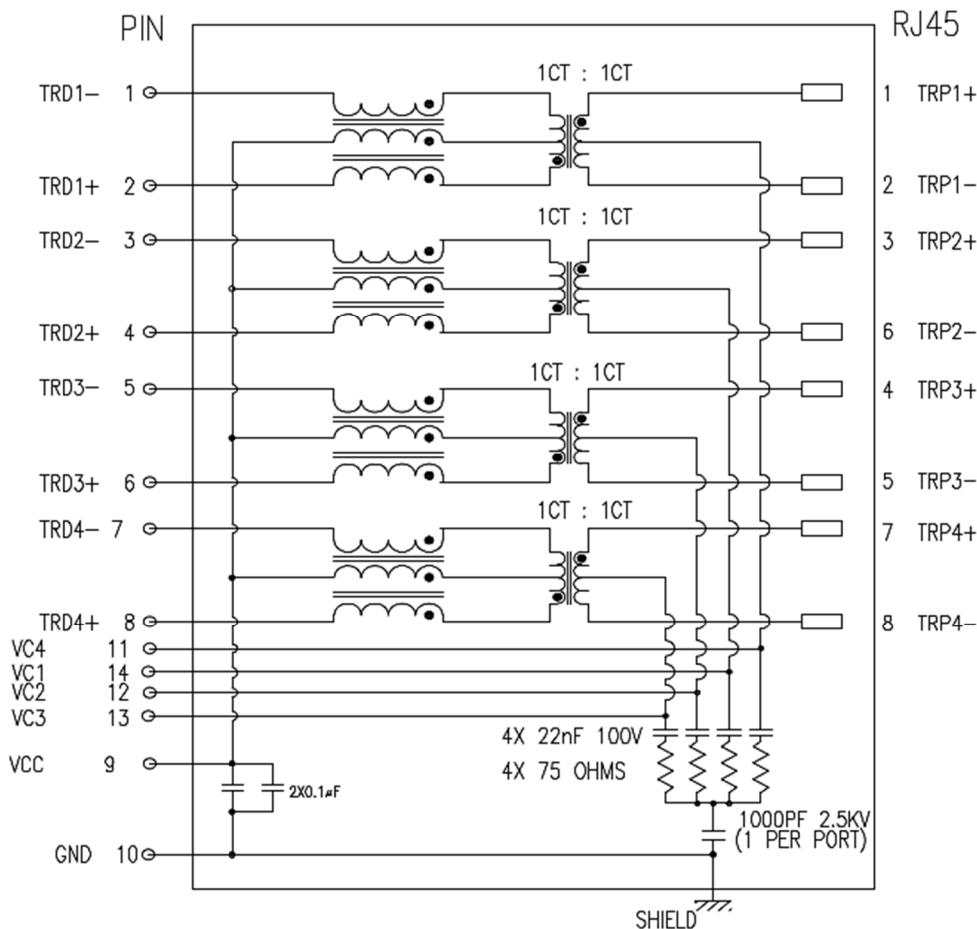
Drawing and Schematic shows characteristics for default Green, Yellow LED combination.  
This MagJack is available with a number of LED combinations  
as shown in the table under > PART OPTIONS.

## > ELECTRICAL SPECIFICATION AT 25°C

### 1. Electrical Specifications: @25°C

- 1.1. Isolation Voltage: 1500V/AC (Input to Output)
- 1.2. OCL: 350uH Minimum @100KHz 100mV 8mA DC
- 1.3. Insertion Loss: -1.2dB Maximum @100KHz-100MHz
- 1.4. Return Loss:
  - 18dB Minimum @1MHz-30MHz
  - 14dB Minimum @30MHz-60MHz
  - 12dB Minimum @60MHz-80MHz
  - 10dB Minimum @80MHz-100MHz
- 1.5. Common Mode Rejection: -30dB Minimum @1MHz-100MHz
- 1.6. Cross Talk: -30dB Minimum @1MHz-100MHz
- 1.7.1.7. POE++ rating: 60W , 1000 mA 58V (For POE++ Products Only)

### Schematics:



## > PART OPTIONS:

**CONTACT PLATING:**  
(6U" SELECTIVE GOLD AS  
STANDARD - NO SUFFIX)

-G15 15U" GOLD  
-G30 30U" GOLD  
-G50 50U" GOLD

LED OPTIONS		L = LEFT LED, R = RIGHT LED	
SUFFIX	LED COLOUR/POLARITY	SUFFIX	LED COLOUR/POLARITY
-1	L= G (+ -) R= Y (+ -)	-15	L= GO (+ - / - +) R= Y (- +)
-2	L= G (+ -) R= Y (- +)	-16	L= Y (+ -) R= GO (+ - / - +)
-3	L= G (- +) R= Y (- +)	-17	L= GO (+ - / - +) R= G (+ -)
-4	L= Y (+ -) R= G (+ -)	-18	L= GO (+ - / - +) R= G (- +)
-5	L= Y (+ -) R= G (- +)	-19	L= G (+ -) R= GO (+ - / - +)
-6	L= Y (- +) R= G (- +)	-20	L= GO (+ - / - +) R= GO (+ - / - +)
-7	L= G (- +) R= G (- +)	-21	L= G (+ -) R= R (+ -)
-8	L= GY (+ - / - +) R= G (+ -)	-22	L= R (+ -) R= G (+ -)
-9	L= GY (+ - / - +) R= G (- +)	-23	L= G (+ -) R= O (+ -)
-10	L= G (+ -) R= GY (+ - / - +)	-24	L= O (+ -) R= G (+ -)
-11	L= G (+ -) R= YG (+ - / - +)	-25	L= A (+ -) R= G (+ -)
-12	L= GY (+ - / - +) R= GY (+ - / - +)	-26	L= G (+ -) R= G (+ -)
-13	L= YG (+ - / - +) R= YG (+ - / - +)	-27	L= O (- +) R= G (- +)
-14	L= GO (+ - / - +) R= Y (+ -)	-28	L= A (- +) R= G (- +)

**G = GREEN   Y = YELLOW   O = ORANGE   A = AMBER   R = RED**

This MagJack can be supplied with any of the LED options listed. Please select the suffix for your desired option. For special LED requirements not shown here, please contact us.

PART NO. EXAMPLE: 501-4203-8 = 2x6 PORT MAGJACK, SHIELDED, GIGABIT, PoE++, 6U" GOLD PLATING, EMI FINGERS, LED OPTION -8. PLEASE VERIFY AVAILABILITY ON OPTIONS PRIOR TO SELECTION.

## > REVISION HISTORY

Revision	Description	Date
1.0	Initial Drawing Release	24.07.2023
2.0	Addition of LED Colour Options	09.08.2023

Revision History provided is for informational purposes only and is believed to be accurate.

