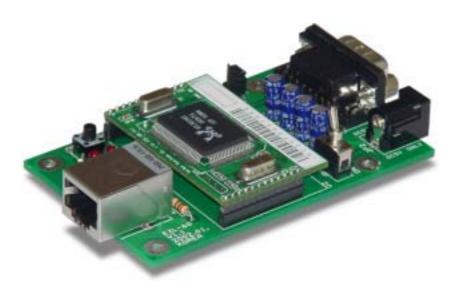
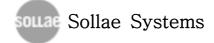
ezTCP/Ethernet(EZL-60) User's Manual

Revision D





## 1. Introduction

EZL-60 is an interface board that interfaces EZL-50L and EZL-50R to ethernet and interfaces their serial ports to RS232.

For connecting EZL-50L and EZL-50R to ethernet, an additional circuit is required. EZL-60 supplies the additional circuit.

And the interfaces of EZL-50L and EZL-50R are 5V TTL level. the EZL-60 supplies RS232 circuit to the EZL-50L and the EZL-50R.

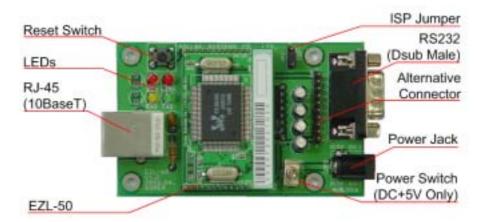
## 1.1. Components

- ☞ EZL-50L or EZL-50R
- ☞ EZL-60 or EZL-60E
- $\ensuremath{\,\mbox{\tiny \mbox{\tiny PC}}}$  RS232 cable to connect PC (option)
- DC 5V SMPS adapter (option)

### 1.2. Interfaces

- ☞ Power: 5V DC (±0.25V)
- Serial : 9 pin Dsub male(RS232)
- Etc. : 1X10 2.54mm pitch connecter(alternative)
  Reset Switch
  ISP jumper

## 1.3. EZL-60



### 1.4. EZL-60E

EZL-60E is compliant to RoHS which is an environmental regulation of EU. EZL-60E has a jumper instead of toggle switch for Power Switch.

The others are as same as EZL-60.

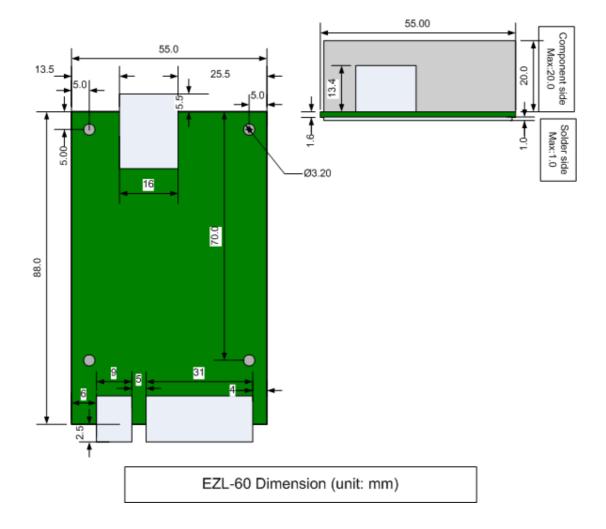


## 2. EZL-60 Operation

\* Please refer to the manuals of EZL-50L or EZL-50R for its operation.

# 3. APPENDIX

## 3.1. EZL-60 dimension



### 3.2. 9 pin Dsub male connector(P1)

1	NC	-	
2	RXD	RXD	RS232 level
3	TXD	TXD	RS232 level
4	DTR	DTR	DSR과 loop back
5	GND	Ground	
6	DSR	DSR	DTR과 loop back
7	RTS	RTS	RS232 level
8	CTS	CTS	RS232 level
9	NC	_	

1	VCC	VCC(DC 5V)		
2	RXD	RXD	RS232 level	
3	TXD	TXD	RS232 level	
4	GND	Ground		
5	CTS	CTS	RS232 level	
6	RTS	RTS	RS232 level	
7	GND	Ground		
8	$P0^1$	TCP Connect Notifier (Active Low)	TTL level	
9	P1	reserved	TTL level	
10	VCC	VCC(DC 5V)		

## 3.3. EZL-60 alternative connector(JP3)

1: Low: during TCP connection / High: during TCP disconnection

## 3.4. ISP Jumper (JP1)

1	2	3	Description		
			Normal Communication Mode		
			Firmware Download Mode (ISP Mode)		
When F71-60 resols it checks the ISP for its operation					

 $\ensuremath{\overset{\scriptstyle \ensuremath{\scriptstyle \times}}{}}$  When EZL-60 resets, it checks the ISP for its operation.

## 3.5. LEDs

LED	color	Operation					
STA (STATUS)	RED	Blink every 1 second:: IP address is assigned but TCP					
		isn't disconnected.					
		Blink 4 times continuously: IP address is not					
		assigned (DHCP, PPPoE)					
		Blink very fast: in the ISP mode					
		On: during TCP connected					
LINK	RED	On: EZL-60 is on the LAN					
RXD	YELLOW	Blink: There is carrier in the LAN					
TXD	GREEN	Blink: EZL-60 transmits data to the LAN					

# 4. Ordering Information

Name	Compos	Composition		Etc.			
EZL-60L	EZL-50L-E +	EZL-60		EZL-60L-E instead of it			delivered tification
EZL-60L-E	EZL-50L-E +	EZL-60E	RoHS Compliant		witho		
EZL-60R	EZL-50R-E +	EZL-60		EZL-60R-E instead of it			delivered tification
EZL-60R-E	EZL-50R-E +	EZL-60E	RoHS Compliant				

# 5. Technical Support, Warranty, and Notes on Operation

### 5.1. Technical Support

If you have any question regarding operation of the product, visit Customer Support FAQ corner and the message board on Sollae Systems' web site or send us an email at the following address:support@eztcp.com

Website Address for Customer Support: http://www.sollae.co.kr/Support/index.html

### 5.2. Warranty

#### 5.2.1. Refund

Upon the customer's request to refund the product within two weeks after purchase, Sollae Systems will refund the product.

#### 5.2.2. Free Repair Services

For product failures occurring within one year after purchase, Sollae Systems provides free repair services or exchange the product.However, if the product failure is due to user's fault, repair service fees will be charged or the product will be replaced at user's expense.

#### 5.2.3. Charged Repair Services

For product failures occurring after the warranty period (one year) or resulting from user's fault, repair service fees will be charged and the product will be replaced at user's expense.

### 5.3. Notes on Operation

• Sollae Systems is not responsible for product failures occurring due to user's alternation of the product.

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- Specifications of the product are subject to change without prior notice for performance improvement.
- Sollae Systems does not guarantee successful operation of the product if the product was used under conditions deviating from the product specifications.
- Reverse engineering of firmware and applications provided by Sollae Systems is prohibited.
- Use of firmware and applications provided by Sollae Systems for purposes other than those for which they were designed is prohibited.
- Do not use the product in an extremely cold or hot place or in a place where vibration is severe.
- Do not use the product in an environment in which humidity is high or a lot of oil exists.
- Do not use the product where there is caustic or combustible gas.
- Sollae Systems does not guarantee normal operation of the product under the conditions a lot of noise exists.
- Do not use the product for a purpose that requires exceptional quality and reliability relating to user's injuries or accidents aerospace, aviation, health care, nuclear power, transportation, and safety purposes.
- Sollae Systems is not responsible for any accident or damage occurring while using the product.



To all residents of the European Union

Important environmental information about this product

This symbol on this unit or the package indicates that disposal of this unit after its lifecycle could harm the environment. Do not dispose of the unit as unsorted municipal waste; it should be brought to a specialized company for recycling. It is your responsibility to return this unit to your local recycling service. Respect your local environmental regulation. If in doubt, contact your local waste disposal authorities.