

ES·MWCT Install Manual

Revision 0.0

Author : H/W Team

REVISION HISTORY

Revision	Date	Description
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OVERVIEW

INTRODUCTION

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MWCT DEVICE OVERVIEW

INTRODUCTION

This chapter summarizes the basic information and feature about MWCT.

1.1 Summary

- MWCT device has 3 phase 4 wire type and single phase 2 wire type. MWCT is installed with 16L, 24L, 36L clamp CT type depends on the external diameter of load line and current capacity.
- MWCT device measures accumulated active power, accumulated reactive power, instant active power, voltage, electric current, frequency and power factor for the 3 phase
- MWCT device supports Zigbee wireless communication and Ethernet, RS-485 wire communication.

1.2 Feature

- MWCT device measures 16 channel by 3 phase 4 wire and 48 channel by single phase 2 wire.
- Set up the display information and device setting by Touch LCD.
- Maximum voltage: 500VAC
- Maximum electric current
CT 16L : 100 A
24L : 500 A
36L : 1000 A
- Set-up of transmitting period is possible as a second.
- It is possible to transmit data to server(PC) without receiver because of wire communication function(Ethernet and RS-485).
- **Professional Installation Requirement:** Please acknowledge your understanding that this device must be professionally installed
- **If the antenna is broken, please contact our A/S center. We will replace the antenna as soon as possible.**

2

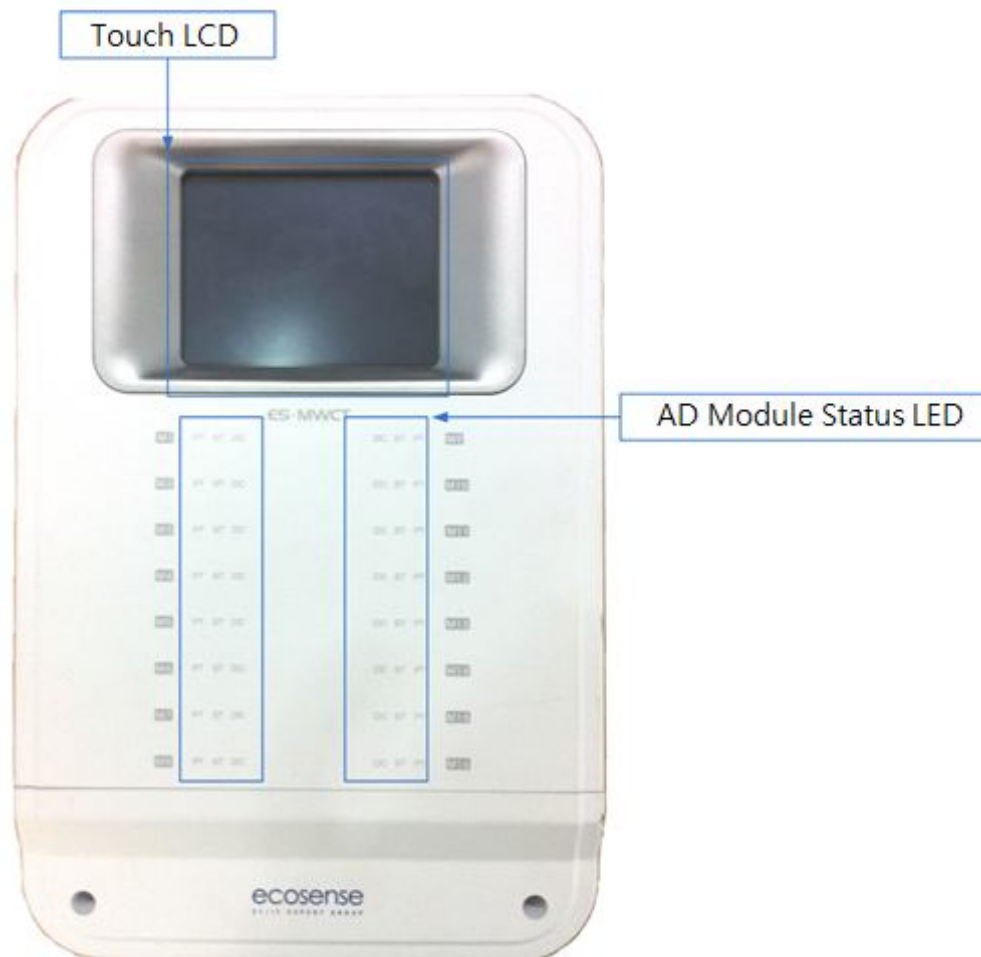
DEVICE COMPONENTS NAME

INTRODUCTION

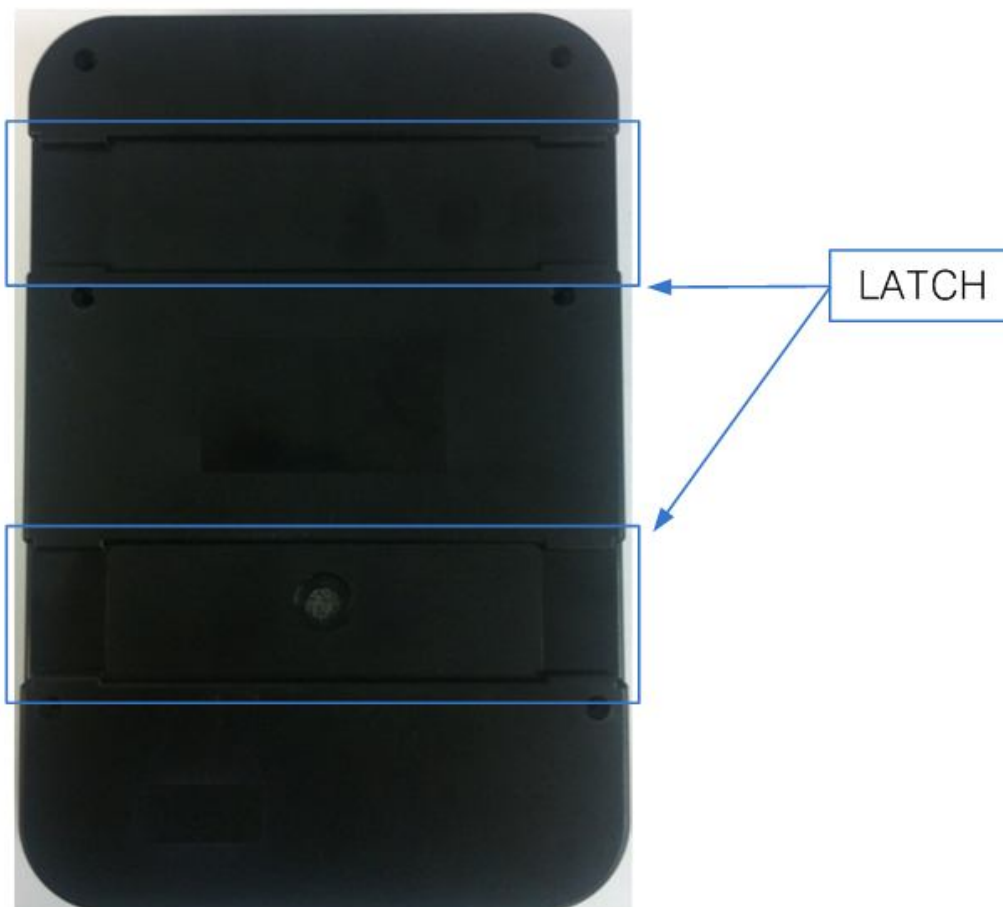
This chapter deals with MWCT device components name.

2.1 Device Components Names

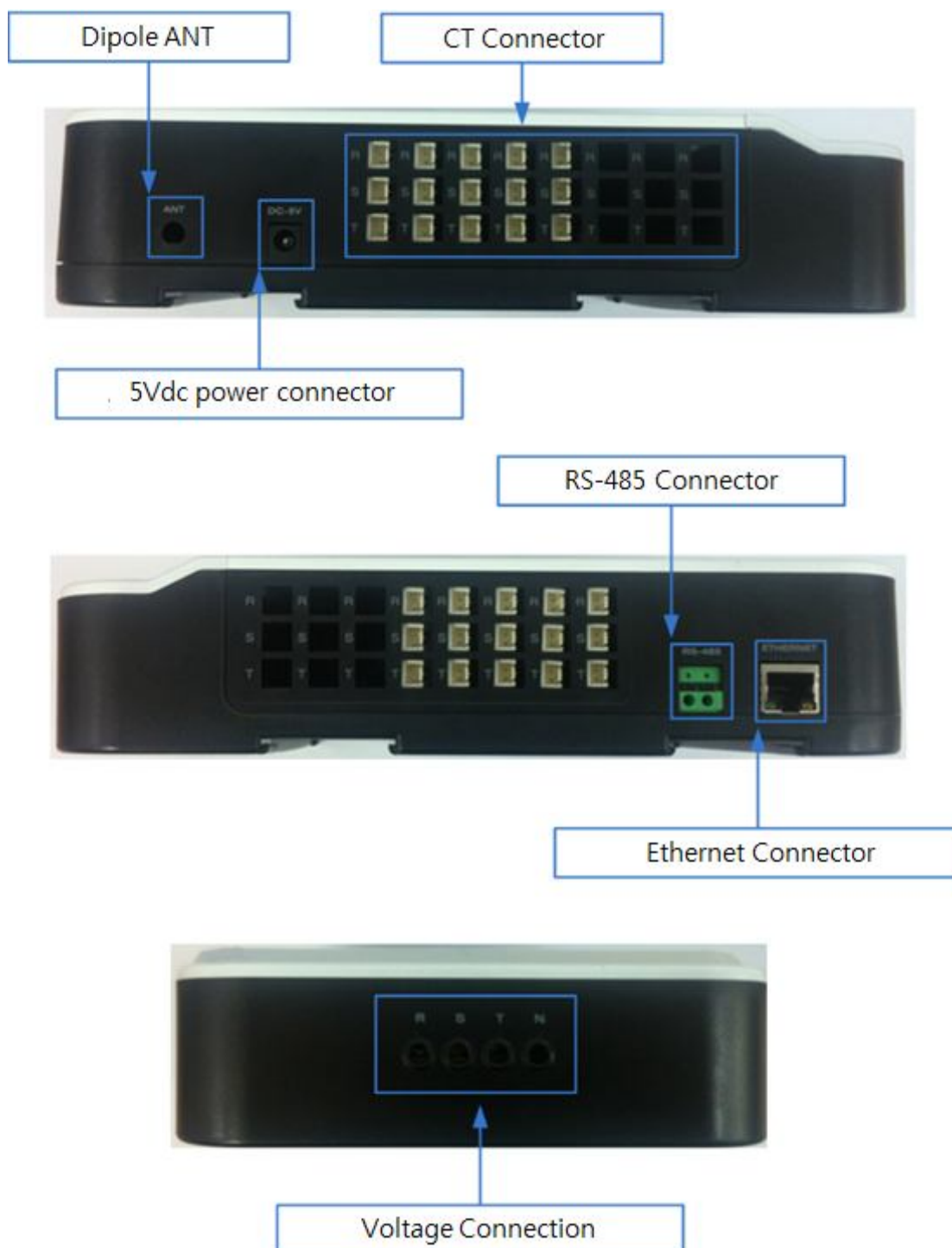
- MWCT front



- MWCT back



- WCTZ side



- MWCT inside



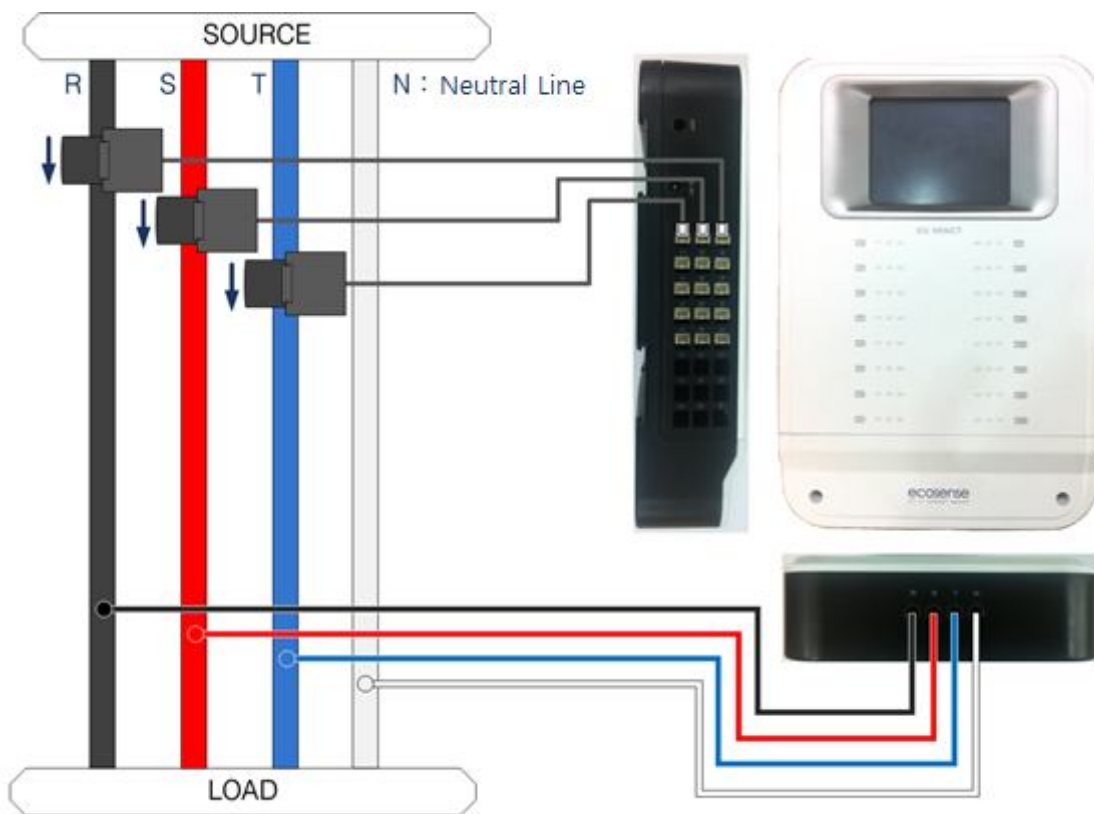
3

WIRING WAY

INTRODUCTION

This chapter deals with MWCT single phase 2 wire and 3 phase 4 wire wiring way.

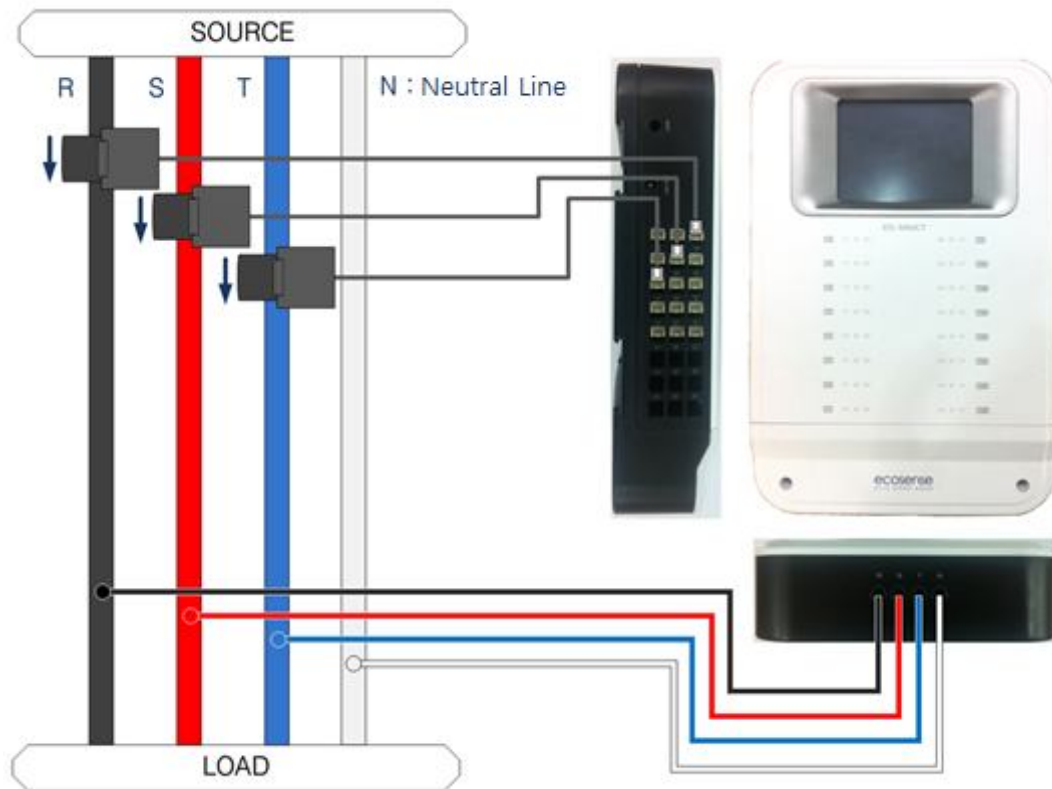
3.1 3 phase 4 wire connection



* It is possible to measure 16 channel with 3 phase 4 wire connection.

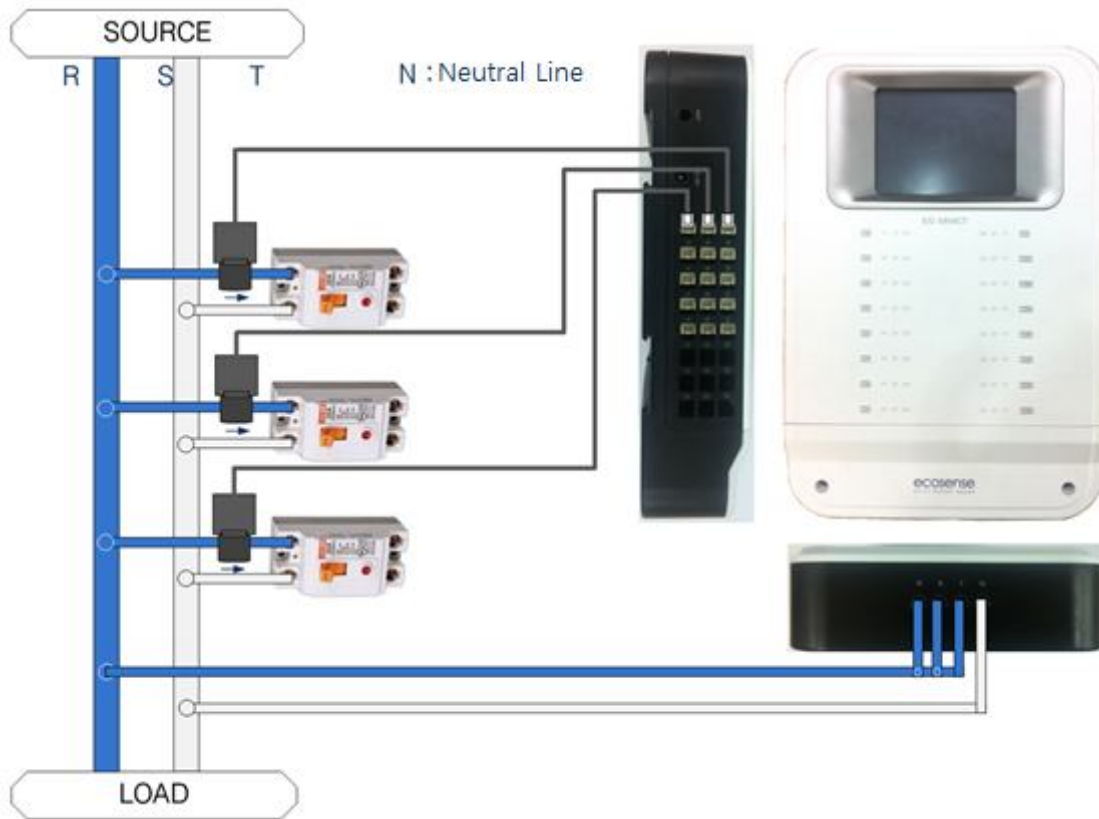
3.2 Single phase 2 wire connection

- 3 phase 4 wire single measurement



- * It is possible to measure 48 channel with single phase 2 wire connection.
- * 16 AD module measures voltage by same voltage line. Therefore, load phase to be measured and AD module CT connector phase must be same.

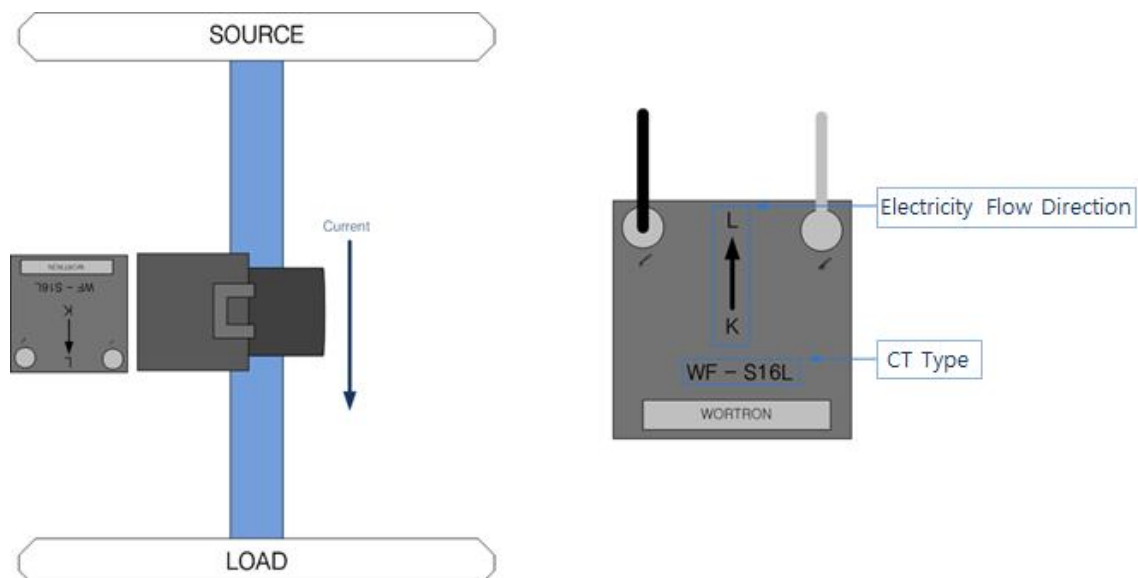
- Single phase 2 wire connection



- * It is possible to measure 48 channel with single phase 2 wire connection.
- * R, S, T phases must be bound at voltage line.
- * It is possible to measure particular loads about 48 channel.

3.3 Clamp CT Connection

- WORTRON CLAMP CT



Electricity Flow Direction : K = SOURCE, L = LOAD

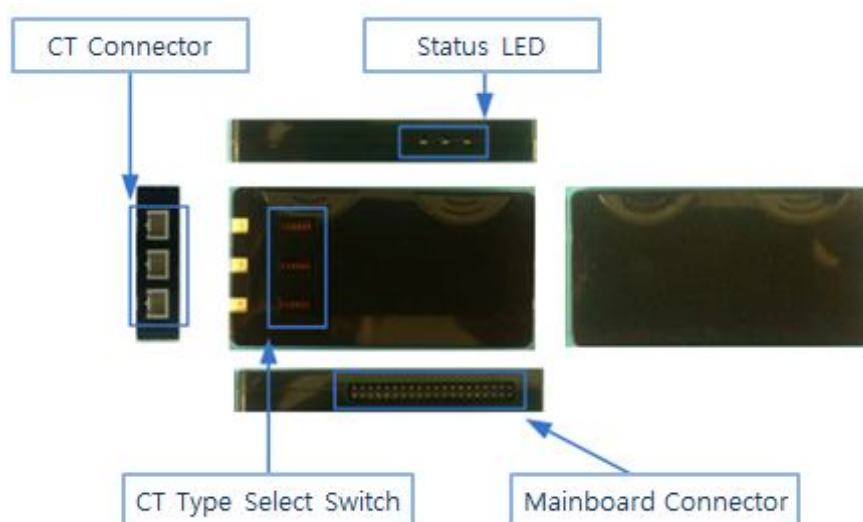
CT Type : S16L = 16L, S24L = 24L, S36L = 36L

4 AD MODULE

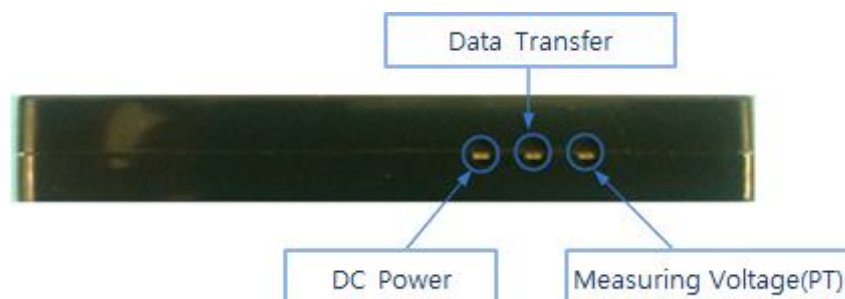
INTRODUCTION

This chapter deals with AD module status LED and CT type select switch.

4.1 AD Module Name



4.2 Status LED



- DC Power On : DC power is running normally.
- Data Transfer : Blink when data is transmitted to the mainboard.
- Measuring Voltage(PT) On : Voltage is measuring normally.

4.3 CT Type Select Switch



- It is possible to choose the CT type by R, S, T phases.

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NOTICE OF INSTALLATION

INTRODUCTION

This chapter deals with notice of MWCT installation.

5.1 AD Module Installation

- If connector set-up is wrong during AD module installation, some serious trouble of the device could be happened. After installation of AD module, you must connect outside 5Vdc adapter before connecting power line and make sure the all AD module is running normally.



- As shown above, you need to check MWCT LCD can read the all AD module installed and run.

5.2 5Vdc Adapter Use

- MWCT has 2100mA(700mA x 3) SMPS internally but we recommend the 5Vc 3000mA adapter for operating normally. However, if all 16 AD modules are installed in MWCT 16 channel, you must use 5Vdc 3000mA adapter.