# CHKLWA User Manual

# **Table of Contents**

1. Overview	3
1.1 Introduction	3
1.2 Technical Specification	3
1.3 Warranty	4
2. Installation	5
2.1 Package Contents	5
2.2 Wall Mount Enclosure	5
2.3 Caution	6
2.4 Install Application	7
3. Dimensions	8

### 1. Overview

#### 1.1 Introduction

The CHKLWA series Star HUB transforms RS-485 into star topology or stelliform topology. Viz. transform only one RS-485 input into (4-32) RS-485 output, and the installation will be quite simple. This enablesbus technology to be quite flexible. The product transforms long-distance distributed nodes, slave devices, and a master device into a dependable RS-485 network. Either Profibus,RS-485, RS-232 or lonworks protocol is available. It supports POLLING protocol. This Product is a simple interface converter. It is transparent and compatible with all upper protocol levels.

The CHKLWA Star HUB can be widely used, such as Industrial Controls, Intelligent Transportation Systems (ITS), Industrial Networking, Supervisory Control and Data (SCADA) and so on.

## 1.2 Technical Specification

DATA	
Number of Channels	1( Input ); 4-32( Output )
Interface	RS-485
RS-485 Working Rate	0 ~ 115.2Kbps
RS-485 Distance	0 ~ 1.2Km
Maximum Interface Access Nodes Number	110
Connector Type	Terminal

GENERAL	
Operating Temperature	-30 ~ 70°C / -30~ +158°F
Operating Humidity	0 ~ 95% non-condensing
Mean Time Between Failure (MTBF)	> 70,000hrs
Dowar Supply Adoptor	Input: 100~240VAC, 15VA, 50/60Hz;
Power Supply Adaptor	Output: +5VDC, 1.5A
Enclosure Color	Silver
Dimensions (Wall mount, L $\times$ W $\times$ H)	135mm×115.5mm×36mm (1 to 10)
(19" rack mounting, L $\times$ W $\times$ H)	300mm× 444MM×44MM(1 to N(N>12)

#### Repair

- □ Please contact your local distributors when Product is defective. Please apply RA in advance and prepay shipping cost when returning the defective product to us. We will pay the cost for sending it back to you.
- Please attach a statement clearly describing the problem.
- We will repair defective product under warranty free of charge to our customer.
- 5 years warranty for product only.
- Any unauthorized modification of hardware and software voids the warranty.
- Warranty does not cover mishandling and/or abuse of the product.

#### 2 Installation

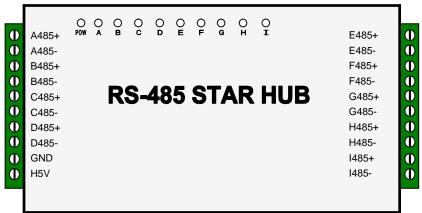
#### 2.1 Package Contents

- One CHKLWA Star HUB (Wall Mount)
- One power supply adaptor
- One User Manual

Please contact dealer or distributor if part is missing or damaged.

#### 2.2 Wall Mount Enclosure

The Top View



#### **LED Indicators:**

POW:	Power Supply	On if power input is OK.
A:	Channel A 485 Data	Flashing if there is activity
E:	Channel E 485 Data	Flashing if there is activity
F:	Channel F 485 Data	Flashing if there is activity
G:	Channel G 485 Data	Flashing if there is activity
H:	Channel H 485 Data	Flashing if there is activity

The others are reserved.

#### Terminal(10 pins) assignment:

A485+: Channel A RS-485data signal "+" A485-: Channel A RS-485 data signal "-"

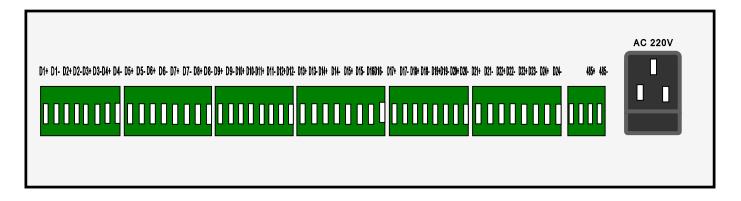
GND: Power Supply Ground

+5V: +5VDC Input

E485+: Channel E RS-485 data signal Channel E RS-485 data signal "-" E485-: F485+: Channel F RS-485 data signal F485- : Channel F RS-485 data signal "-" Channel G RS-485 data signal "+" G485+: Channel G RS-485 data signal "-" G485- : H485+: Channel H RS-485 data signal H485- : Channel H RS-485 data signal "-"

The others are reserved.

## 19" rack mounting





RS-485 HUB

POW D1 D2 D3 D4 D5 D6 D7 D8 D9 D10 D11 D12

D13 D14 D15 D16 D17 D18 D19 D20 D21 D22 D23 D24 D25

D0 D13 D14 D15 D16 D17 D18 D19 D20 D21 D22 D23 D24 D25

#### **LED Indicators:**

POW: Power Supply On if power input is OK. D1-D25: Channel 1-25 RS-485 Data Flashing if there is activity

The others are reserved.

#### **Terminal assignment:**

DN(N:1-24)+: Channel 1-24 RS-485 data signal "+"
DN(N1-24)-: Channel 1-24 RS-485 data signal "-"

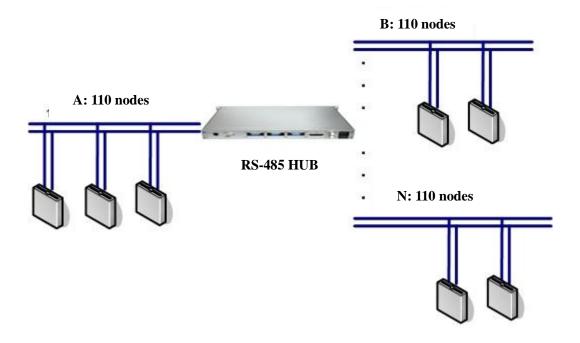
485+: Master station RS-485 data signal "+"

485-: Master station RS-485 data signal "-"

#### 2.3 Caution

- Switch off all power supply before installation
- The terminal "GND" must be connected to the blue wire; the terminal "+5VDC" must be connected to the red wire.
- The CHKLWA Star HUB provides N(4-32) channels of bidirectional RS-485 Data, so the users can select one channel of RS-485 Data as the "Input Signal", and the other channels of RS-485 Data as the "Output Signal".

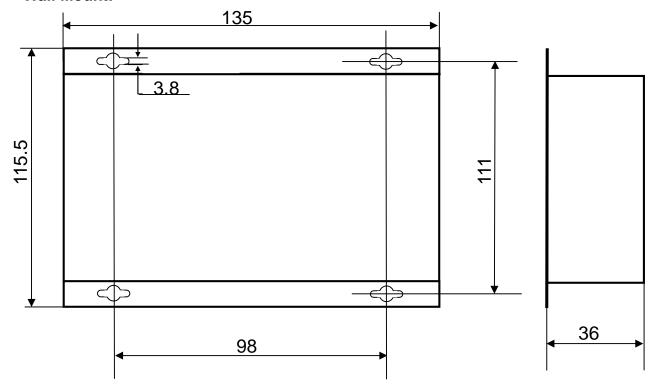
# 2.4 Install Application



# Application Diagram

# 3 Dimensions (mm)

**Wall Mount:** 



19" rack mounting

