# CHK-WA

# User Manual

# Table of Contents

# 1. Overview

## 1.1 Introduction

The CHK-WA series Star HUB transforms profibus into star topology or stelliform topology. Viz. transform only one Profibus input into （4-32） Profibus output, and the installation will be quite simple. This enablesProfibus technology to be quite flexible. The product transforms long-distance distributed nodes, slave devices, and a master device into a dependable Profibus network. Either Profibus,Canbus, 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 CHK-WA 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 | Profibus |
| RS-PRO Working Rate | 0 ~ 1.5Mbps,0-12Mbps |
| RS-PRO Distance | 0 ~ 1200m |
| Maximum Interface Access Nodes Number | 128 |
| Connector Type | Terminal |

| GENERAL | |
|---|---|
| Operating Temperature | -30 ~ 70°C / -30~ +158ºF |
| Operating Humidity | 0 ~ 95% non-condensing |
| Mean Time Between Failure (MTBF) | > 70,000hrs |
| Power Supply Adaptor | Input: 100~240VAC, 15VA, 50/60Hz; Output: +5VDC, 1.5A |
| Enclosure Color | Silver |
| Dimensions (Wall mount, L× W×H) (19" rack mounting, L× W×H) | 135mm×115.5mm×36mm（1 to 4） 300mm× 444MM×44MM(1 to N(N>12) |

## 1.3 Warranty

■ 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.
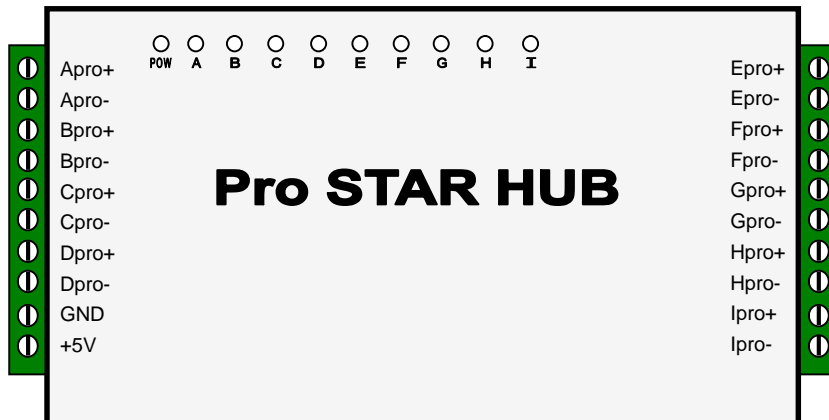
## 2  Installation

### 2.1  Package Contents

- One CHK-WA 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 PRO Data | Flashing if there is activity |
| E: | Channel E PRO Data | Flashing if there is activity |
| F: | Channel F PRO Data | Flashing if there is activity |
| G: | Channel G PRO Data | Flashing if there is activity |
| H: | Channel H PRO Data | Flashing if there is activity |

The others are reserved.

**Terminal( 10 pins ) assignment:**

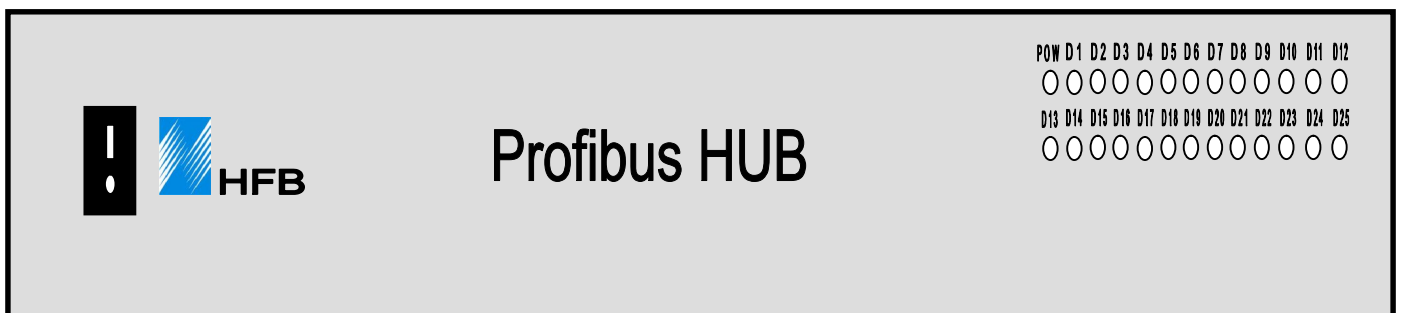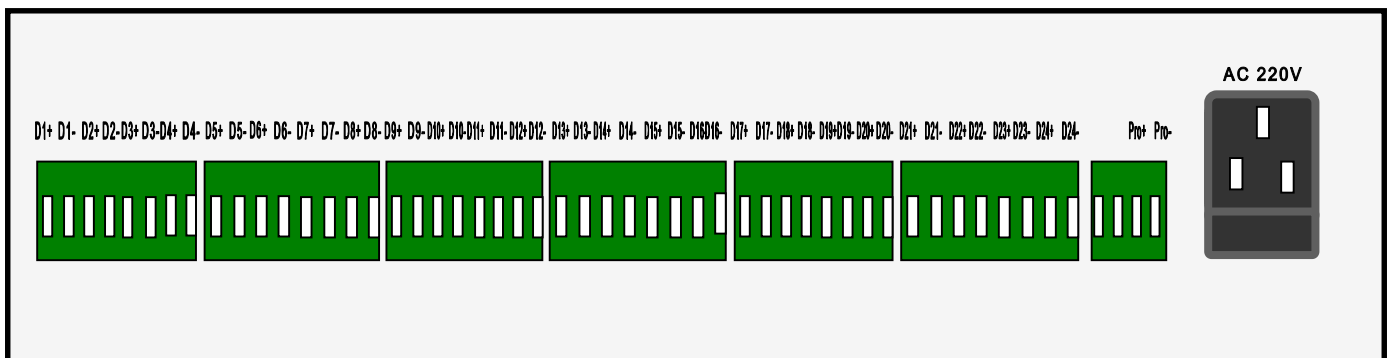APRO+ :       Channel A PRO data signal "+"
APRO− :       Channel A PRO data signal "−"


GND:          Power Supply Ground
+5V:          +5VDC Input

EPRO+ :       Channel E PRO data signal "+"
EPRO− :       Channel E PRO data signal "−"
FPRO+ :       Channel F PRO data signal "+"
FPRO− :       Channel F PRO data signal "−"
GPRO+ :       Channel G PRO data signal "+"
GPRO− :       Channel G PRO data signal "−"
HPRO+ :       Channel H PRO data signal "+"
HPRO− :       Channel H PRO data signal "−"

The others are reserved.

## 19" rack mounting

**LED Indicators:**

POW:        Power Supply                                    On if power input is OK.
D1-D25:     Channel 1-25 profibus Data              Flashing if there is activity
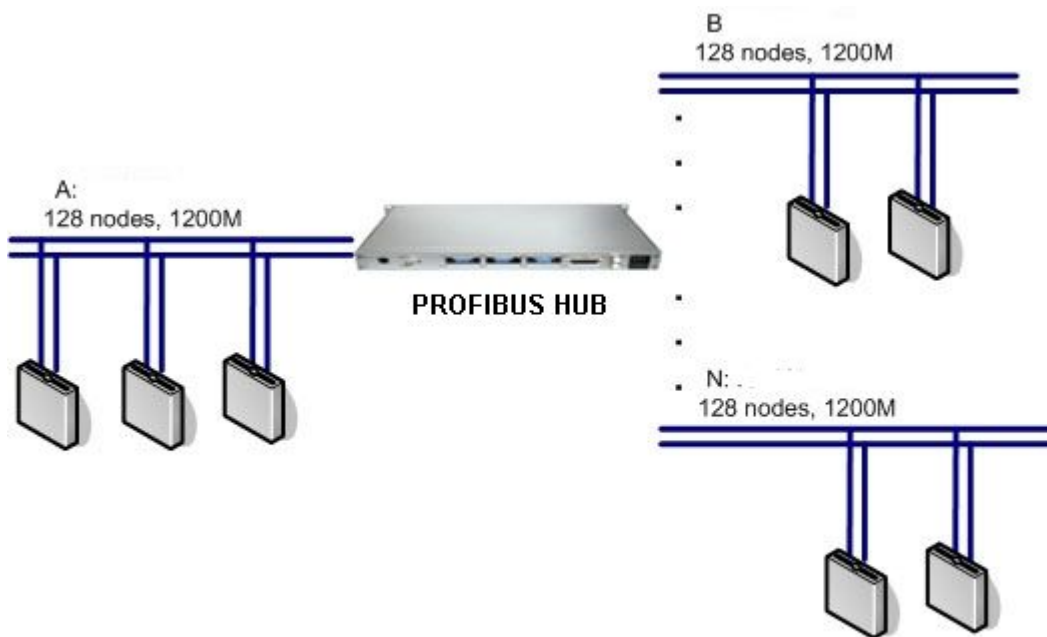
The others are reserved.

**Terminal assignment:**

DN(N:1-24)+ :     Channel 1-24 Profibus data signal "+"
DN(N1-24)– :       Channel 1-24 Profibus data signal "–"
PRO+      :        Master station Porfibus data signal "+"
PRO-      :        Master station Porfibus 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 CHK-WA Star HUB provides N(4-32) channels of bidirectional PRO Data, so the users can select one channel of PRO Data as the "Input Signal", and the other channels of PRO Data as the "Output Signal".
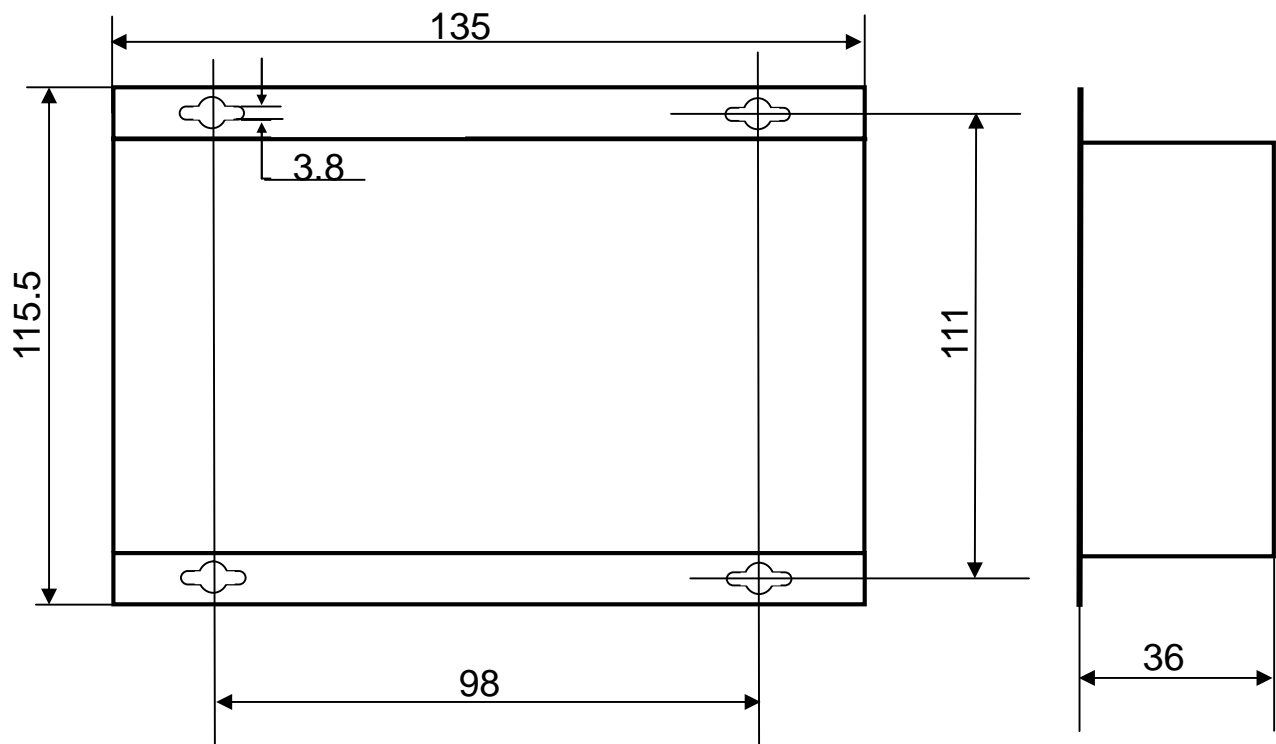
## 2.4 Install Application

# Application Diagram

## 3  Dimensions (mm)

### Wall Mount:



### 19" rack mounting