



# Hydrogen Refueling Nozzle

T635 Series

User Guide



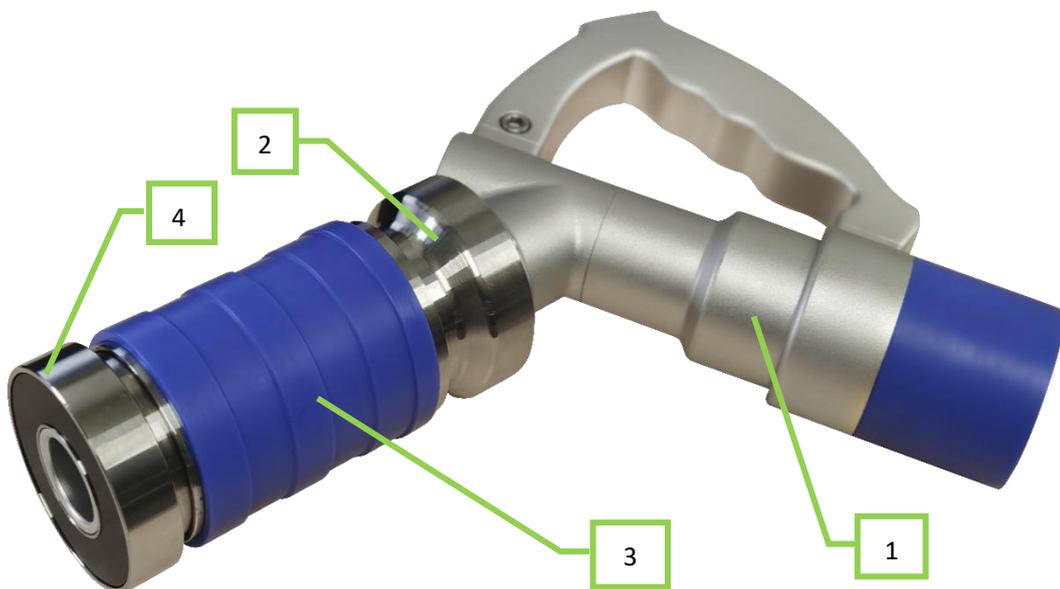
Chengdu Andisoon Measure Co., Ltd.

# Contents

I. Product Introduction.....	1
II. Technical Parameters.....	2
III. Product Installation.....	2
IV. Application Method.....	5
V. Precautions.....	6

## I. Product Introduction

This hydrogen refueling nozzle is designed into an automatic locking structure. After the head of the hydrogen refueling nozzle and the hydrogen refueling port are connected in place, the internal claws of the hydrogen refueling nozzle automatically block and lock the hydrogen refueling port, so as to form a reliable mechanical connection between the hydrogen refueling nozzle and the hydrogen refueling port. After the successful communication between the hydrogen refueling nozzle and the on-board system, press the hydrogen filling button on the hydrogen dispenser, and the high-pressure hydrogen flows to the on-board cylinder at the rear end of the hydrogen refueling port through the hydrogen refueling nozzle, so as to realize the function of vehicle hydrogen filling; after filling, the hydrogen refueling nozzle can release the pressure of the gas in the chamber of the hydrogen refueling nozzle through the valve switch of the pipeline in the hydrogen dispenser. After the pressure relief, manually slide the outer sliding sheath on the head of the hydrogen refueling nozzle backward to separate the hydrogen refueling nozzle from the hydrogen refueling port and complete the whole filling process.



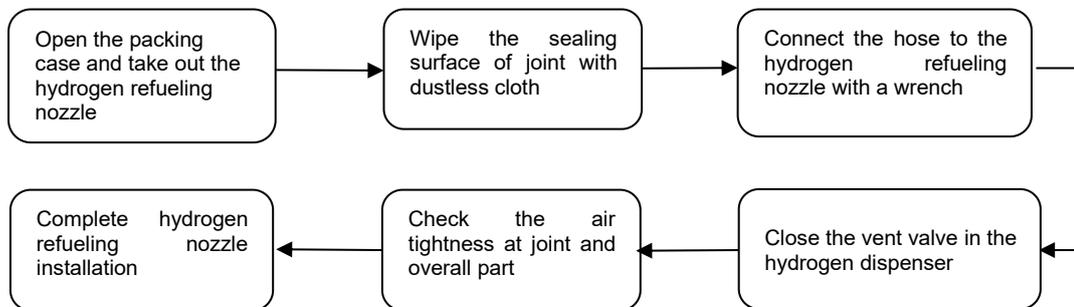
1. Hose sheath 2. Nozzle head 3. Outer sliding sheath 4. Infrared receiver module

## II. Technical Parameters

Table of Technical Parameters of Hydrogen Refueling Nozzle	
Working medium	H <sub>2</sub>
Medium temperature	-40 °C ~ + 85 °C
Ambient temperature	-40 °C ~ + 60 °C
Relative air humidity	≤95 %
Rated working pressure	70MPa
Nominal diameter	DN4
Air inlet size	9/16"-18 UNF
Explosion proof mark	Ex ia IIC T4 Gb
IP rating	IP65

## III. Product Installation

### Installation Procedure

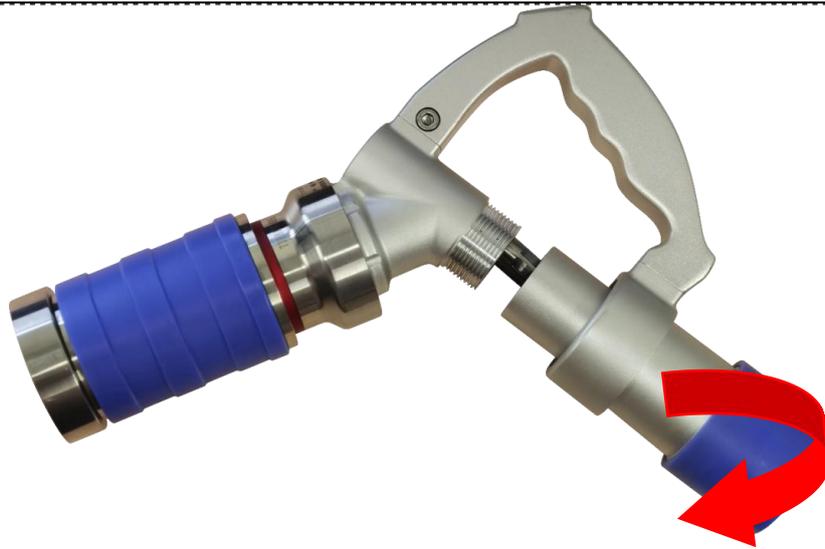


### Installation Method

- 1、 Remove the hydrogen refueling nozzle from the packing case in a dry and safe environment;
- 2、 Rotate the hose sheath to separate the sheath from the main body of the hydrogen refueling nozzle;
- 3、 The inlet connector of hydrogen refueling hose and the power cable connector of infrared communication module are threaded in from the big blue end of hose sheath and out from the small natural color end of aluminum alloy;
- 4、 Wipe the sealing surface of the inlet connector of the hydrogen

refueling nozzle and the sealing surface of the conical surface of the hydrogen refueling hose with a clean and dust-free cloth to avoid the sealing failure caused by impurities damaging the sealing surface during the connection process;

- 5、 After the hydrogen refueling hose and the hydrogen refueling hose are initially connected by hand, the S = 13 explosion-proof solid wrench is used to block the hexagonal position of the inlet connector, and the S = 19 explosion-proof solid wrench (the size of different brands of hose is different) is used to block the hexagonal nut of the hydrogen refueling hose. Keep the S = 13 solid wrench still, and turn the S = 19 solid wrench to make the two connect in place; connect the quick connector of the power line of the infrared communication module. After completion, pay attention to checking whether the connection between the hydrogen refueling hose, the hydrogenation gun as well as the quick connector of the power line of infrared communication module is firm and reliable;
- 6、 Control the main pipeline valve of the hydrogen dispenser to slowly refuel part of hydrogen into the hydrogen refueling nozzle, and use the hydrogen detector to detect whether there is leakage in the connection between the hydrogen refueling nozzle and the hydrogen dispenser. If any, turn off the main pipeline valve of the hydrogen dispenser and operate the vent valve in the hydrogen dispenser, release the internal pressure of the hydrogen refueling nozzle completely, and then slightly tighten the connection between the hose and the hydrogen refueling nozzle. Repeat the above operation till no leakage is detected at the connection. Repeatedly operate the main pipeline valve and vent valve of the hydrogen dispenser for more than 5 times to complete the gas replacement inside the channel of the hydrogen refueling nozzle. At the same time, check whether the infrared communication module and the hydrogen dispenser can communicate normally. If the communication is not possible, please check the connectors and related lines;
- 7、 According to the direction where the hose sheath is removed, the hose sheath and the main body of the hydrogen refueling nozzle are assembled and fastened;
- 8、 At this point, the connection between the hydrogen refueling nozzle and the hydrogen dispenser is completed.



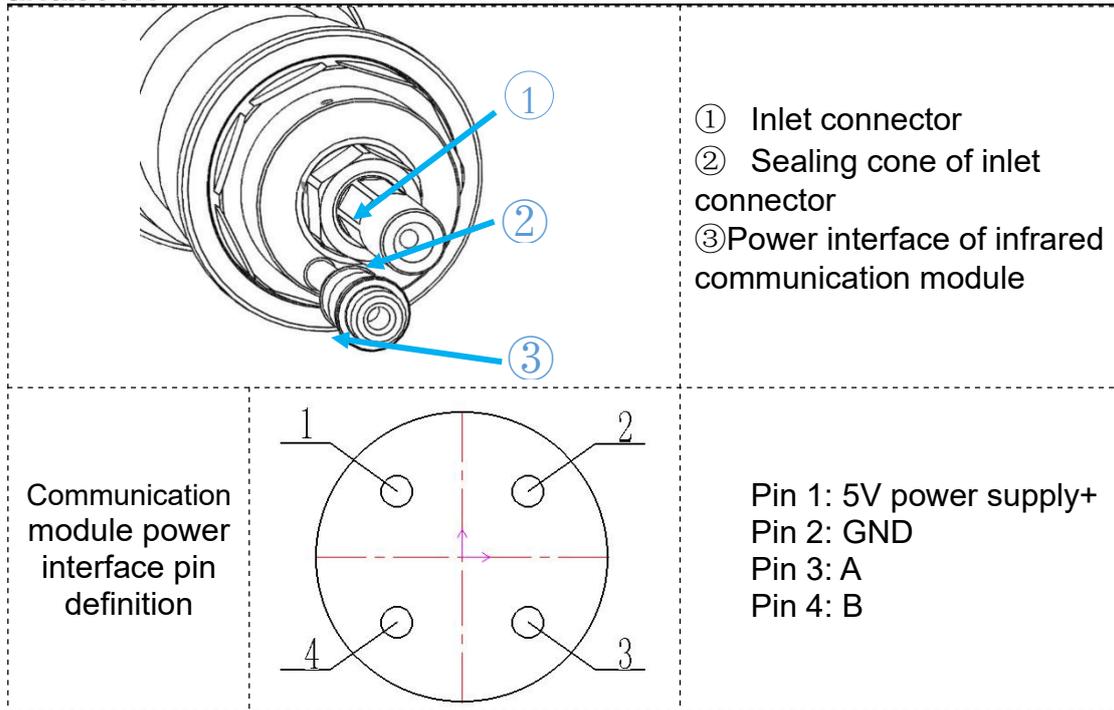
Turn off the hose sheath anticlockwise and let the hydrogen refueling hose pass through the hose sheath



Connect and fasten the hydrogen refueling hose and hydrogen refueling nozzle

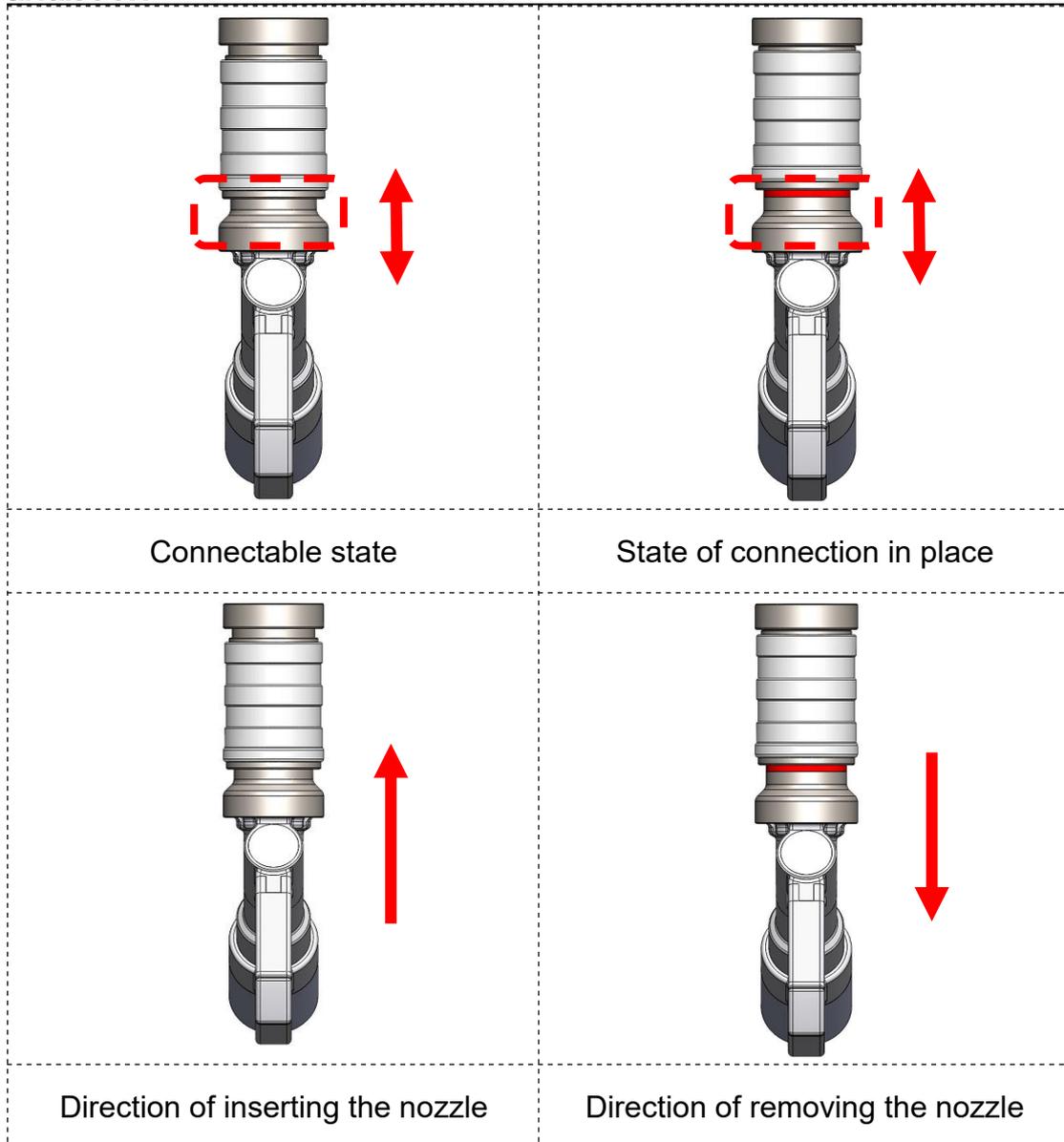


Turn the hose sheath clockwise and screw the nozzle body in place



#### IV. Application Method

- 1、 Hold the handle of the hydrogen refueling nozzle with the right hand and the outer sliding sheath of the nozzle with the left hand. Slide the sheath to draw it back with left hand and confirm that the hydrogen refueling nozzle is in a connectable state (at this moment, the hydrogen refueling nozzle can maintain a connectable state by its own structure, and the left hand does not need to exert a setback force continuously);
- 2、 The head of the hydrogen refueling nozzle is concentric with the hydrogen filler and inserted axially. Hold the hydrogen refueling nozzle handle in the right hand and push it in with axial force. When it is connected in place, the external sliding sheath of the nozzle head will spring out automatically under the action of spring force, giving out a clear sound of metal impact (showing the red ring). At this point, the hydrogen refueling nozzle and the hydrogen filler have been reliably connected;
- 3、 Press the gas-adding button on the operation panel of the hydrogen dispenser to realize the hydrogen refueling;
- 4、 After the hydrogen filling, the hydrogen dispenser will automatically stop filling gas; after the internal pressure relief of hydrogen refueling nozzle, hold the external sheath of the nozzle head with the left hand and hold the handle of the hydrogen refueling nozzle with the right hand to slide the outer sheath backward axially with the left hand until the hydrogen refueling nozzle is in a separable state (covering the red color ring), and retreat axially with the left and right hands to take out the hydrogen refueling nozzle.



## V. Precautions

### Disassembly process (replacing the existing hydrogen refueling nozzle):

Make sure that the hydrogen dispenser is shut down and the main pipeline valve is closed;

Make sure that the gas in the hydrogen refueling hose is drained before removing the hydrogen refueling nozzle from the hose;

### Installation process:

Make sure that the hydrogen dispenser is shut down and that the main pipeline valve is turned off;

Make sure that the sealing cone of the hydrogen refueling nozzle and the hydrogen refueling hose is clean and undamaged.

Chengdu Andisoon Measure Co., Ltd.  
Packing List

Product Name: Hydrogen Refueling Nozzle

Model: T635

S/N	Spec & Code	Title	Unit	Qty.	Remarks
1	T635	Hydrogen Refueling Nozzle	Pcs.	1	
2		Product Qualification Certificate	Pcs.	1	
3		User Guide	Copy	1	

**Chengdu Andisoon Measure Co., Ltd.**

**Address:** No. 88, Wulian Road West, Gongxing Subdistrict, Shuangliu District, Chengdu, Sichuan, China

**Tel:** 028-63165820

**Fax:** 028-63165817

**E-mail:** [info@andisoon.com](mailto:info@andisoon.com)

**Website:** <http://www.andisoon.com>

Version: MAA-T635-2A The above parameters are for reference only and subject to technical changes without prior notice.