

SMART - CTIS

[Central Tire Inflation System]

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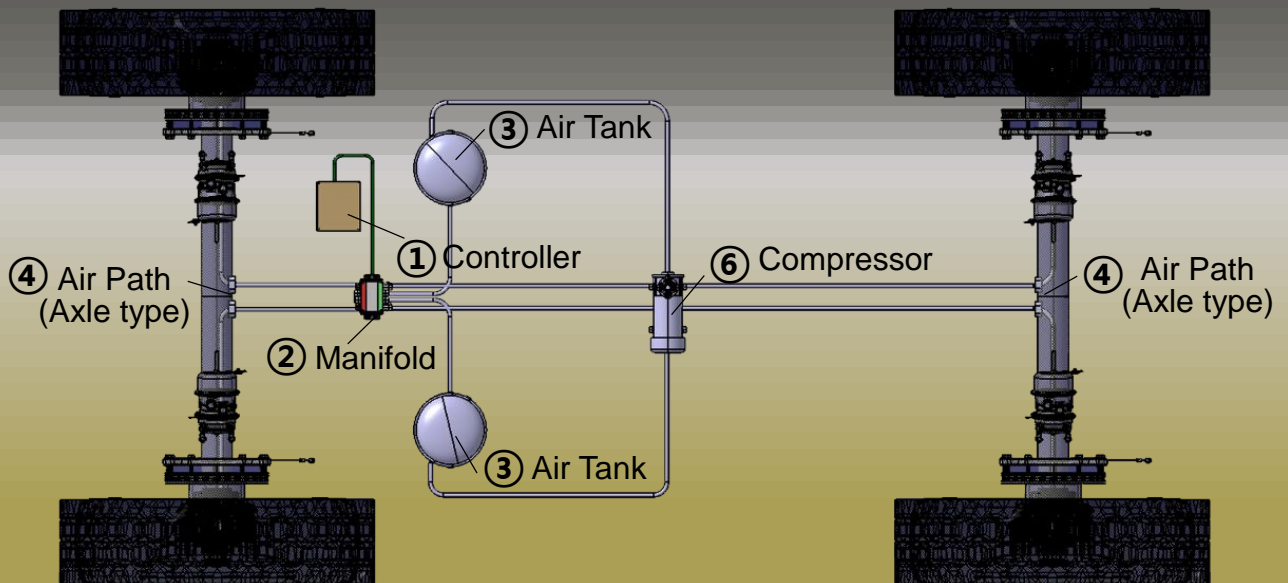
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CTIS (Central Tire Inflation System)

Tire pressure control wheel by wheel on the move which optimize tire pressure by sensing vehicle speed, terrain and load.



Feature

- ❖ Full automatic / Manual selection Operation
- ❖ Control air pressure in and out wheel by wheel
- ❖ Simultaneous inflation and deflation wheel by wheel
 - Front / Rear / Left / Right
- ❖ Adaptive Air Hub applicable to all vehicles
- ❖ 4 modes of terrain
 - Highway, Cross country, Mud/Sand/Snow, Emergency
- ❖ 3 modes of Load
 - Full / Half / Empty
- ❖ Black out
- ❖ Overspeed warning (CAN Bus)
- ❖ Punctured and leaking tire warning
- ❖ Isolate flat tires individually
- ❖ Maximum supply pressure : 200 PSI
- ❖ Pre-set pressures for road and field operation
- ❖ Customized functions

CTIS components

All components are patented and provide high performance to optimize tire pressure in real-time wheel by wheel.

1. Controller



Operation control

Terrain mode (4 mode)

- Highway
- Cross country
- Mud/Snow/Sand
- Emergency

Payload mode (3 mode)

- Full load
- Half load
- Empty

Customizable

Specification

1. DC CHARACTERISTIC

- Input:10.8~28 VDC / Output:5 VDC
- P/C : Under 15WH

2. Input port

- 4 Analog : 0~12VAC / 4 Digital:0~ 5VDC

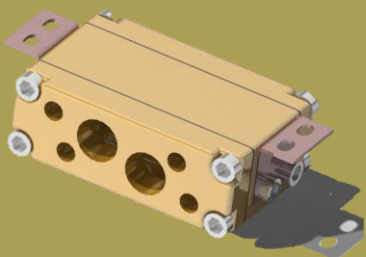
3. Output port

- 8 Digital: 5 VDC / 1 Analog:12 VAC

4. CAN Bus

5. RS-422 Serial port for Remote Controller

2. Manifold



Control air in and out

Separate structure for in and out from wheels

Independent air path to each wheels

Customizable

Specification

1. Allowable Pressure : 57 Kg/cm²

2. 2 Bank type electronic manifold

3. 5 Input 1 output / 1 input 5 output

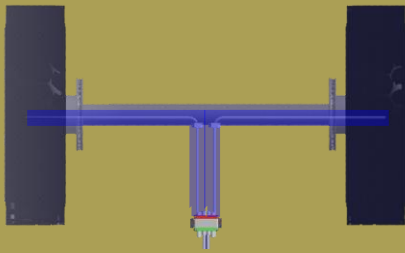
4. Embed electronic valve&pressure sensor

3. Double Air Tank



High (1.5 times) Pressurized air tank
Max pressure : 25Kg/cm²
1 Input / 4 Output Port

4. Adaptive Hub



Applicable to all vehicle without CTIS hub
Simple adaptive air path hub to wheels
Rotating seal inside the axle
No external exposure
No axle oil contamination

5. Real-time Sensor



Real-time stability control
Applicable function by customer's needs
Dual output (Analog + Digital)
Customizable

6. Compressor



200 psi max pressure
Weight 20 lbs / 9Kg
Size H172xW106xL276
6 CFM @ 0psi / 2.6 CFM @ 100psi
82 amps draw @ 100 psi