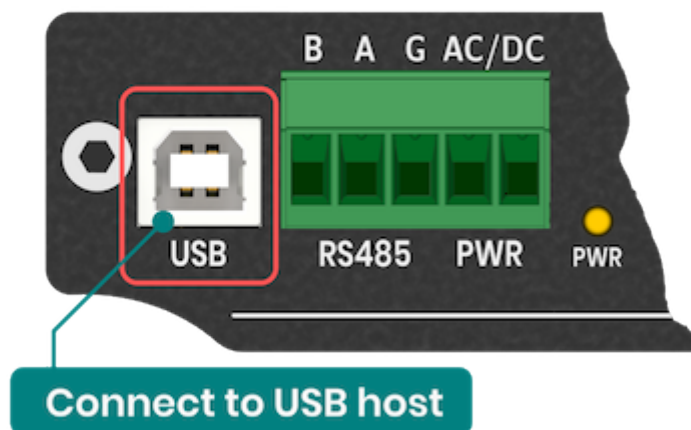# Configuration Manual

Please read carefully before starting. Also read the product safety information.

Wiring and connection

The ADI-524 can be powered from a DC power supply in the range of 8-36V. Also, it can be powered from the USB port of a computer or IoT gateway. Both power sources can be connected simultaneously without fear of damage.
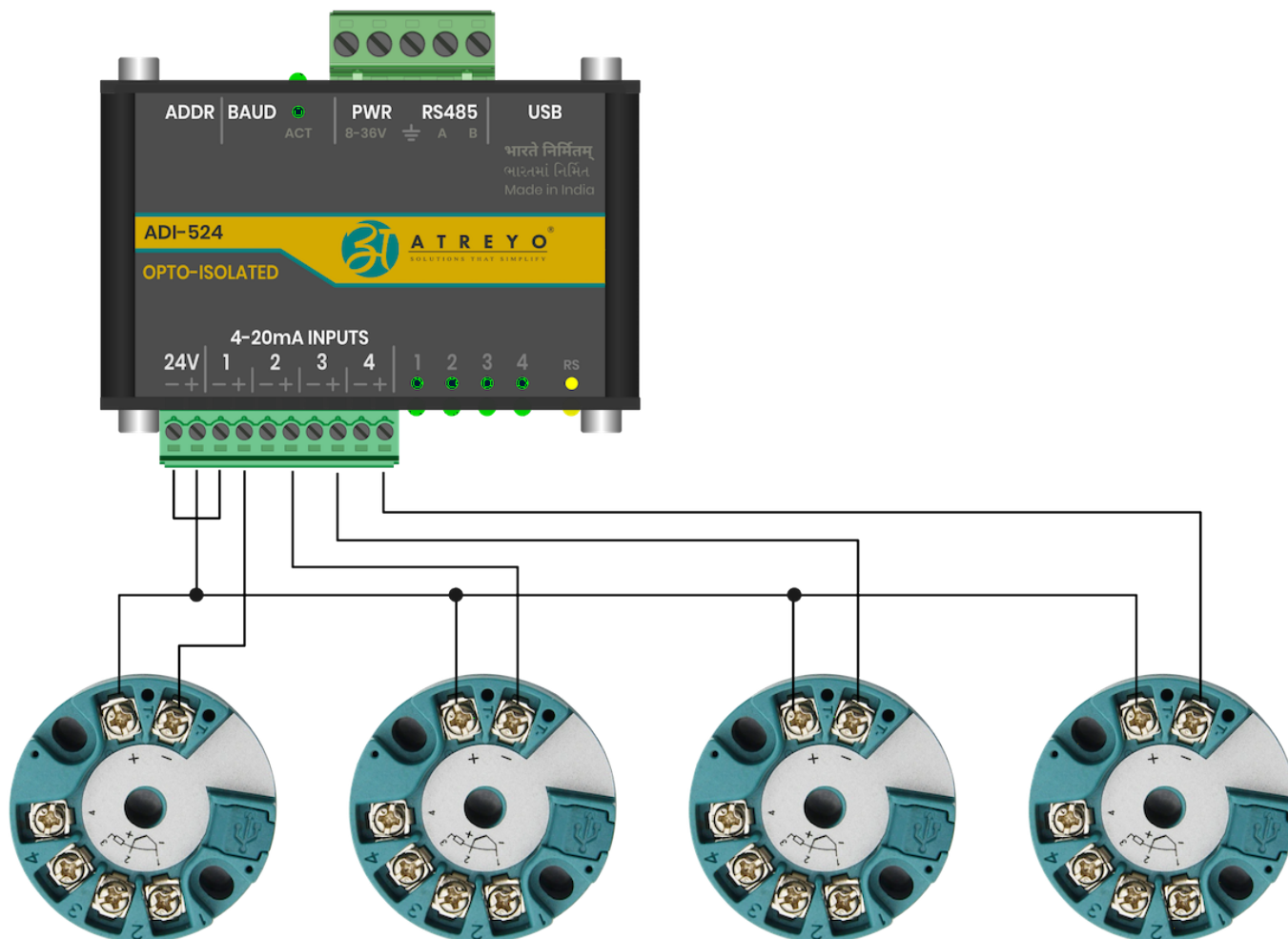

In order to connect sensors with a 4-20mA output, it is necessary to provide them power in the loop. Here are some possible connection methods. Either the built-in isolated 24V power supply can be used or an external current loop power supply can be used.
All current inputs marked as - on the housing are connected together. The isolated 24V, on the other hand, has no galvanic connection to any of the inputs.
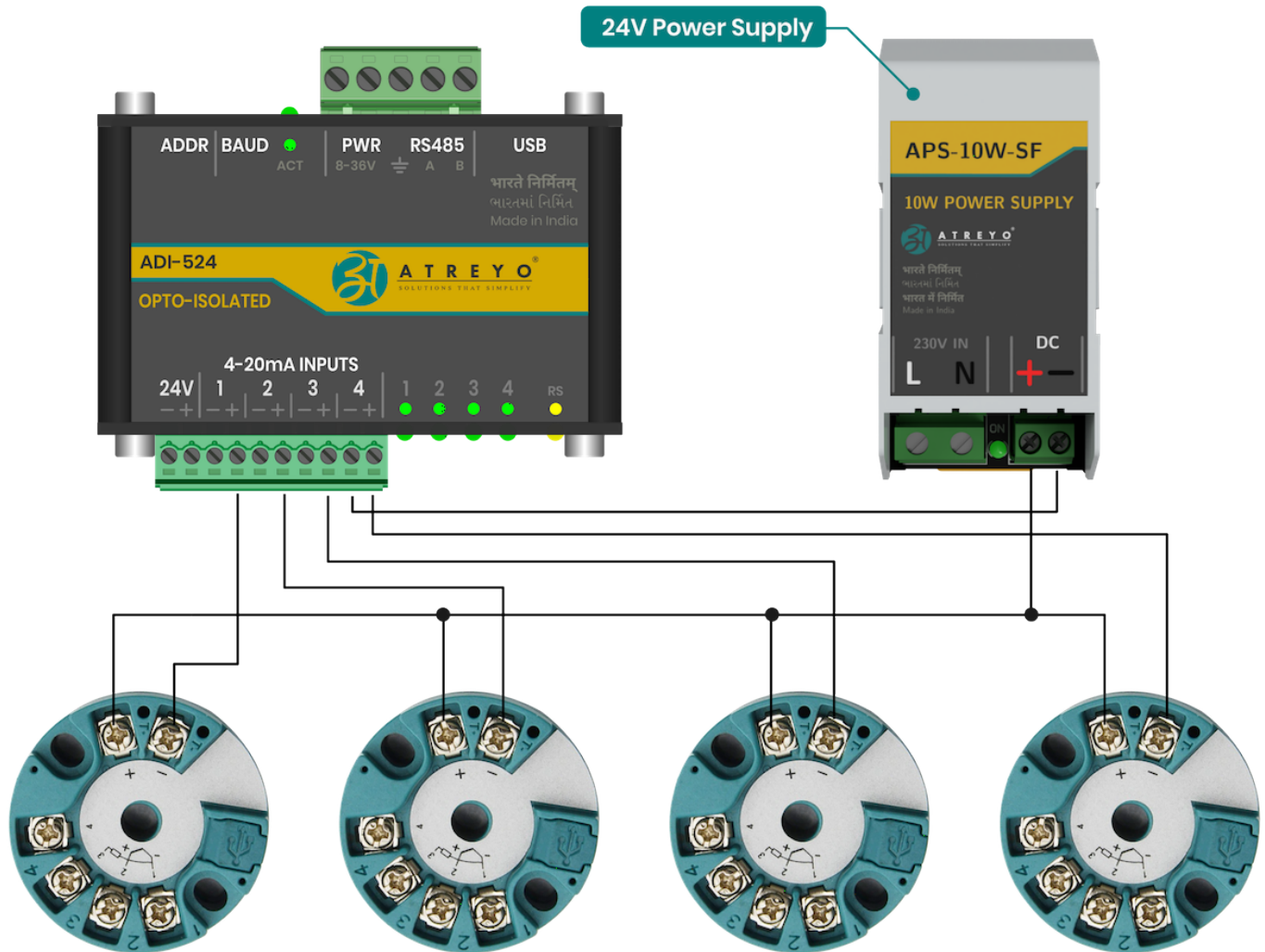
Connection Diagrams

Built-in 24V

Connection of four RTD converters using the built-in 24V power supply.

External 24 V

Connection of four RTD converters using the external 24V power supply.

Modbus configuration

It is necessary to set the serial port parameters and the Modbus address using the DIP switch before powering on the device. (reference table for both are given below)

> Make sure to reboot/restart device irrespective of any change in DIP switch to be reflected in hardware

MODBUS Serial Port Parameter

Parameter	Option/range
Baudrate	9600 – 115200 configurable

Parameter	Option/range
ata bit	8
Parity	None
Stop bit	1

MODBUS Baudrate Configuration

User can set the baud rate using 2 Bit DIP switch. This allows to set baud rate between 9600bps to 115200bps as shown below table.

Baudrate	SW1	SW2
9600	OFF	OFF
19200	ON	OFF
38400	OFF	ON
115200	ON	ON

> After setting up the switch, it is necessary to restart the ADI by disconnecting the power supply and, if using USB power, to disconnect it.

MODBUS Address configuration

User can set the slave ID address using 4 Bit DIP switch. This allow 0 to 15 different IDs to be set. The number below the switches are added together and the result will be identifier of the device slave ID.

Slave ID	SW3	SW4	SW5	SW6
1	OFF	OFF	OFF	OFF
1	ON	OFF	OFF	OFF
2	OFF	ON	OFF	OFF
3	ON	ON	OFF	OFF

Slave ID	SW3	SW4	SW5	SW6
4	OFF	OFF	ON	OFF
5	ON	OFF	ON	OFF
6	OFF	ON	ON	OFF
7	ON	ON	ON	OFF
8	OFF	OFF	OFF	ON
9	ON	OFF	OFF	ON
10	OFF	ON	OFF	ON
11	ON	ON	OFF	ON
12	OFF	OFF	ON	ON
13	ON	OFF	ON	ON
14	OFF	ON	ON	ON
15	ON	ON	ON	ON