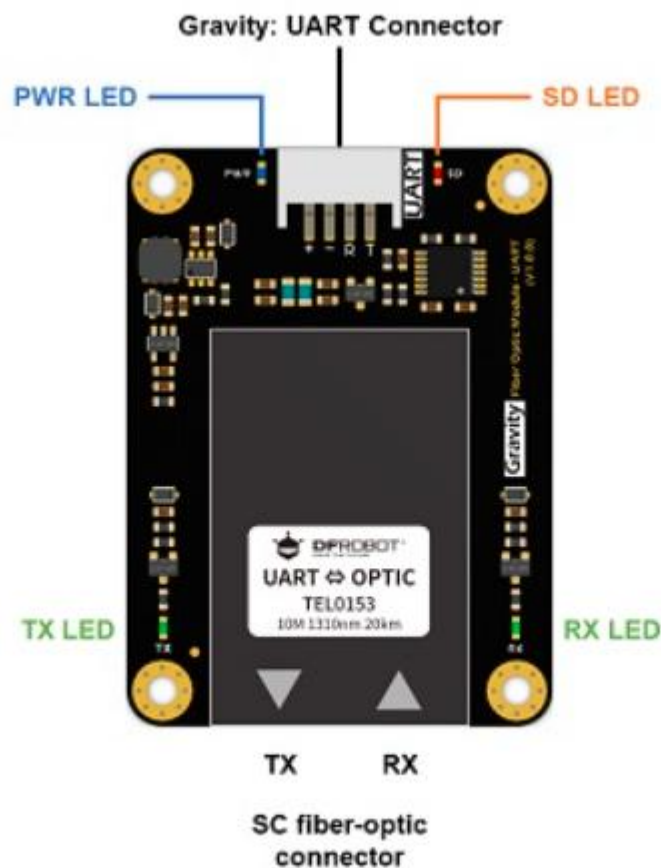


## Introduction

Still make do with the hard and thick shielded twisted pair for remote signal-transmitting? And even drop the baud rate again and again just for transmission stability? Now get rid of these problems by using this Gravity: UART Fiber Optic Transceiver Module from DFRobot!

With complete electrical isolation for preventing electromagnetic interference, this module runs at 2000000 baud at any time within a distance of up to 10km. Besides, it features lightning protection and can share cable trunking with strong power. Also, users can use it with a passive optical splitter to realize one-to-many star networking.

Two transceiver modules for only half the price of shielded twisted pair can provide users with long-distance & interference-free fiber-optic communication, good value for money!

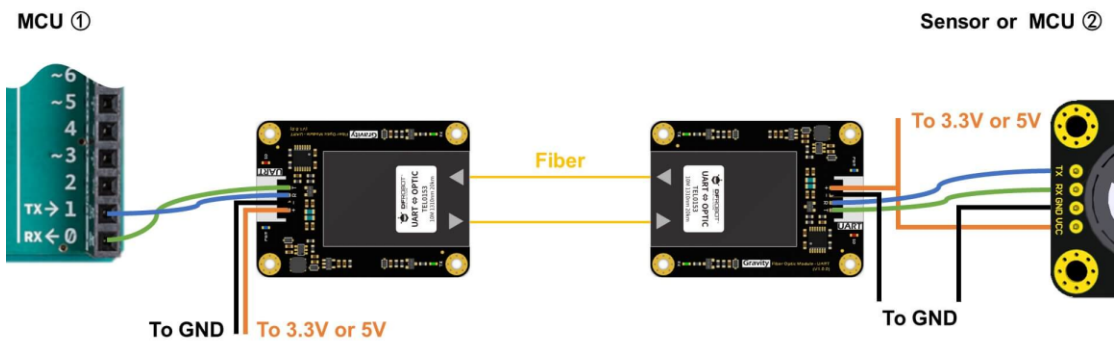


## Interface & Pin

Pinout

Name	Description
Gravity: UART	UART interface, connect to MCU or sensor
PWR LED	Power indicator, turns ON when powered on
SD LED	Indicator for optical fiber disconnection, which lights up when the fiber optic disconnection is detected
TX LED	Indicator for fiber optic transmitting, which blinks when transmitting signal
RX LED	Indicator for fiber optic receiving, which blinks when receiving signal
SC Fiber Optic interface	Connect to SC fiber optic interface

SD LED can not show all the fiber disconnections or unstable transmissions. Please use a red pen, optical power meter and other tools to check error when a connection problem occurs.



Wiring Instructions

Features

- With complete electrical isolation
- Lightning protection

Applications

- Fiber-optic communication
- One-to-many star networking

Specification

- Supply Voltage: 3.3V~5V
- Signal Voltage: 3.3V~5V

Maximum Speed: 2000000 baud

Communication Distance: 10km

Operating Wavelength: 1310nm

Fiber Optic Type: Single Mode

Fiber Optic Interface: SC

Operating Temperature: 0~70°C

## **Documents**

[Product wiki](#)

[Dimensions](#)

## **Shipping List**

Gravity: UART Fiber Optic Transceiver Module x1

Gravity 4P Connector x1