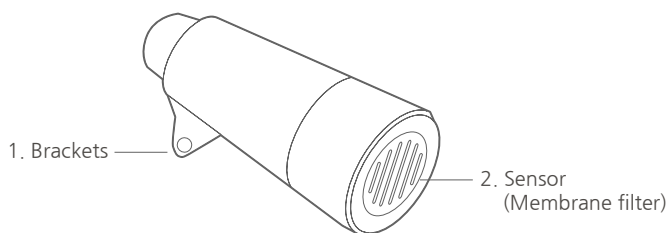## High Density CO2 Gas Transmitter

UA59-CO2-20-U

- Real-time CO2, Temperature transmitter
- Long Lifetime using NDIR
- Waterproof Housing with SUS303
- Individual Certificated included
- Operating On Windows / Linux / MacOS
- AT Command Support
- PC Recording Software (Tapaculo Lite)
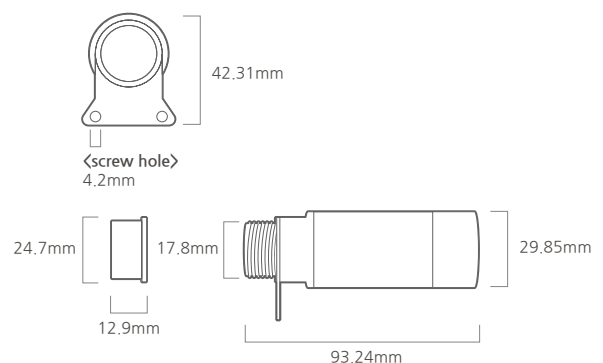- Android Recording App. (Tapaculo Mobile)

UA59-CO2-20-U device is designed to measure Carbon Dioxide(CO_2) and temperature in real-time via the USB connector. It has a very high accuracy optical NDIR CO_2 sensor, which can measure high concentration of CO_2. Also, it has a waterproof stainless steel housing in order to use it on any chamber.

The UA Series is automatically recognized as a serial port on the operating system and accessed using the AT command. Multiple USB connections of the UA device could compose the multi-channel sensor. The sensor data is not stored in the UA, but recording in PC and Android device. 128CH real time monitoring software on pc, Tapaculo Lite is downloadable on our website(www.radionode365.com). And android real time recording application is also available from google play store. The optional RN17X model helps UA series for you to setup remote web monitoring system

Hardware

1. Brackets
2. Sensor (Membrane filter)

Dimensions

42.31mm
〈screw hole〉
4.2mm
24.7mm
17.8mm
29.85mm
12.9mm
93.24mm

⚠ CAUTION!

- Use in a non-condensing environment. Otherwise, distorted measurements are read.

Contact Information

- www.radionode365.com
- master@dekist.com

High Density CO2 Gas Transmitter

UA59-CO2-20-U Specifications

Sensor Channel Info.	• CH1: CO2 • CH2: Temperature
Gas Sensor Type	NDIR Optical sensor
Gas Sensor Filter	Membrane Filter
Body Material	Stainless Steel
Measurement Range	• CO2: 0 ~ 20%, 0 ~ 200,000 ppm • Temperature : 0 ~ 50°C (32 ~ 122°F)
Measurement Unit (Selection using SW)	• CO2: %(Default), ppm • Temperature: °C(Default), °F
Measurement Cycle	1 sec
Sensor Resolution	• CO2: 0.01% (100ppm) • Temperature: 0.25°C
Sensor Accuracy (Repeatability)	• CO2: 5% of measured value • Temperature: ±0.25°C
Gas Response Time	T90 < 30 secs
Warming up Time	<10 secs after power-on
Operating Condition	• Temperature: 0 ~ 50°C (32 ~ 122°F) • Humidity: 0 ~ 95%RH (non-condensing) • atm: 950 ~ 10,000 mBar
Lifetime	< 8 Years
Power Consumption	5V (Max. 80mW)
Calibration Certificate	Individual Certificate. Calibration with 5% CO2 calibration gas mixtures
Calibration Method	One point calibration
USB Port	USB 2.0 Type A Plug
Output Signal	USB digital, CDC Device (AT Command)
Software Support	• Tapaculo Mobile 2CH recording software on Android devices Download: Google play store • Tapaculo Lite 128CH recording software on PC Download: www.radionode365.com • Calibration Software Calibrator that compensates measuring error. Download: www.radionode365.com

Application

• CO2 incubator
• Agricultural Products CA storage warehouse
• Centralized Gas Monitoring System
• Smart Farm Application
• Remote Alert System

Product Components

Model	Component
UA59-CO2-20-U	• UA59-CO2-20-U(1EA) • USB Extension Cable 1.5m(1EA) • Individual Calibration Certificate(1EA)

Optional Accessories

Model	Component
RG40	• Film Type USB Extension Cable 50cm (1EA)