

# SENKO IR Link

Infrared Communication & Management Interface

TECHNICAL DATASHEET

## PRODUCT OVERVIEW

The **SENKO IR Link** serves as an essential wireless communication bridge between SENKO portable gas detectors and Windows-based PC software. By utilizing wireless line-of-sight infrared telemetry, the module enables fast, secure configuration, calibration management, and historical data logging without requiring a physical cable attachment to the detector body.

## HARDWARE & SYSTEM ARCHITECTURE

### 1. Infrared Optical Transceiver

Located behind the front dark acrylic window. Aligns directly with the gas detector's IR sensor (~1 cm distance) for high-speed parameter synchronization.

### 2. Host USB Interface

Connects directly to the host PC's USB port (5V bus powered). Translates USB serial communications into encrypted infrared light pulses.

### 3. Visual Status Indicators

Dual LED indicators: Blue LED blinks during active IR data transfer; Red LED illuminates during power-up or initial optical handshakes.

### 4. Industrial Enclosure

Housed in a high-visibility, impact-resistant polymer housing engineered for both laboratory benchtop and field maintenance environments.

## DEVICE COMPATIBILITY MATRIX

| Device Model           | Instrument Type           | Primary Functions                                      |
|------------------------|---------------------------|--------------------------------------------------------|
| SENKO SGT              | Disposable Single-Gas     | Alarm thresholds, calibration date, log extraction     |
| SENKO SGT-P            | Replaceable Single-Gas    | Sensor calibration, alarm set points, firmware updates |
| SENKO MGT              | Multi-Gas (4-Gas)         | Bump test intervals, STEL/TWA limits, event logs       |
| SENKO SP-MGTP          | Pumped Multi-Gas          | Pump flow parameters, calibration, data log transfer   |
| MGT Docking Station II | Automated Docking Station | Bay 1 configuration & fleet data centralization        |

## KEY MANAGEMENT CAPABILITIES

### Data Log Extraction

Download complete historical logs including gas concentration trends, alarm events, peak exposure levels, and calibration records in standard CSV format for compliance reporting.

### Alarm Management

Customize Low (1st), High (2nd), Short Term Exposure Limit (STEL), and Time-Weighted Average (TWA) alarm trigger thresholds to meet regional plant safety standards.

### Calibration & Bump Setup

Perform digital Zero and Span calibrations via PC software. Program automated bump test reminders and calibration interval schedules ranging from 0 to 365 days.

### Firmware & Profiles

Flash the latest device firmware to gas detectors. Save and load standardized configuration profiles (.cfg) to rapidly program entire fleets of safety instruments.

## CONNECTION & OPERATION GUIDE

- 1 Connect the SENKO IR Link to an available USB port on your host Windows PC.
- 2 Launch the official SENKO IR Link Management Software (or Docking Manager).
- 3 Position the IR Link unit facing the gas detector's infrared port maintaining a **~1 cm gap**.
- 4 Click the **OPEN** button in the software interface. The system will sync and confirm connection.

**Operational Tip:** Ensure optical windows are clean and free from dust or grease prior to transmission. When using with the MGT Docking Station II, insert the IR Link into **Bay 1** for station software synchronization.

## TECHNICAL SPECIFICATIONS

|                        |                                                   |
|------------------------|---------------------------------------------------|
| Power Supply           | 5V USB Bus Powered (No external battery required) |
| Communication Distance | ~1 cm direct optical line-of-sight alignment      |
| Physical Dimensions    | 51 x 44 x 20 mm (2.0 x 1.73 x 0.78 inches)        |
| Weight                 | 24.3 g (0.054 lbs)                                |