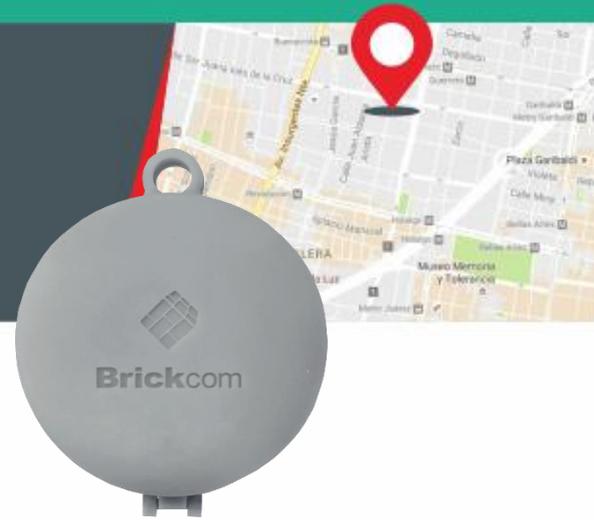# Tracker – Module Series

Bluetooth® 5.0
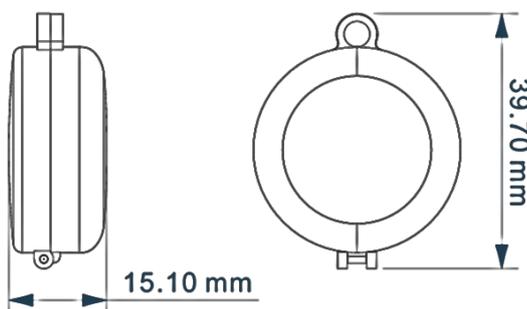

IF-TR-01

IF-TR-01 InstantFind® Module is an ultra-low-power Bluetooth Module (long istance/ultra-low power consumption). It transmits once every 2 seconds and only requires < 0.08mW. It can replace any Bluetooth Module on the market. Provide original Bluetooth functions and services.

This module features a fully integrated 2.4GHz radio transceiver and baseband processor for Bluetooth 5.0 applications. It can be used as a standalone application-specific communication processor or as a wireless data link in hosted MCU systems where ultra-low power is critical. It supports flexible memory architecture for storing profiles, stacks and custom application codes, and can be updated using Over-The-Air (OTA) technology.

IF-TR-01 module uses Nordic nRF52840 BLE chipset. It combines the excellent performance of a leading RF transceiver with a low-power ARM Cortex-M4 and rich powerful supporting features and peripherals. It also contains 256KB RAM, and 1MB flash memory.

- Bluetooth® 5, IEEE 802.15.4-2006, 2.4 GHz transceiver
- ARM® Cortex®-M4 32-bit processor with FPU, 64 MHz
- ARM® TrustZone® Cryptocell 310 security subsystem
- Secure erase/Flexible power management
- Advanced on-chip interfaces
- Nordic SoftDevice ready with support for concurrent multiprotocol
- 12-bit, 200 ksps ADC-8 configurable channels with programmable gain
- 64 level comparator / Temperature sensor
- 15 level low-power comparator with wake-up from System OFF mode

Specification	
Type	BLE Module
Memory	1 MB+2MB flash and 256 KB RAM
Modulation	Bluetooth 5.0 (2Mbps/1Mbps/500kbps/125kbps) IEEE 802.15.4-2006 (250kbps) Proprietary 2.4 GHz (2Mbps/1Mbps)
Host Interface	USB/UART/SPI
Application	Low-power Wireless IoT Product
Antenna Type	On-board Chip Antenna
Tx Power	28.0 dBm
Rx Sensitivity	LE 1Mbps: -95dBM / LE 2Mbps : -92dBM / LE 125Kbps: -103dBM / LE 500Kbps: -99dBM
Operation Temp	-40~85℃
Dimension	32.0mm(L) x 39.7mm(W) x 15.1mm(H)
Power Supply	3.3VDC
Battery model	CR2032
Battery Lifetime	2 years

Product Dimension: