

# Modular Conversion Receiver

# R-CM

Radio Receiver for Wireless Torque Wrench & Driver  
Prevents missed tightening



M-FH : FH Module

M-FD : FD/FDD Module

M-BLA, M-BLE Module

- Interchangeable modules allows for easy upgrades from basic wireless signal to torque data transfer system
- Quick connect system makes it simple to pair receiver with torque wrenches
- T-FHM transmitter and R-CM+M-FH receiver feature longer distance communication with dual antennas and battery monitoring functions



## Features



Interchangeable module  
built-in position



**Possible to use with a variety of existing wireless torque wrenches and easily upgrade as new product modules are introduced.**

R-CM receiver with M-FH

## Applicable Interchangeable Radio Modules and wireless products

### M-FH Module for FH Series



Upon reaching set torque, transfer tightening completion signal and ID to receiver. It helps to prevent missed tightening caused by human error.

M-FH module has two different setting mode.

**M-FH mode: Long range communication mode**

**R-FH mode: Previous FH series compatible mode**

FHW has built in double tightening prevention mechanism in the wrench and the transmitter.

### M-FH: Advanced Wireless Counting Pokayoke

T-FHM		5-420N·m	420N·m ~ *
QLFHM50N			* Upon request
FHW		5-280N·m	* Should be set at M-FH mode
CSPFHW25N3X10D w/SH-N*			

### R-FH: Previous FH series Wireless Counting Pokayoke

RTDFH		20-500cN·m	
RNTDFH		40-500cN·m	
QLFHP-MH/CLFHP-MH		0.4-15N·m	
QLFHP/CLFHP		2-15N·m	
PQLFHP/PCLFHP		1-15N·m	
QSPFHP/CSPFHP		0.3-12N·m	
SPFHP		0.4-8N·m	
RSPFHP		2-9N·m	
QSPCAFHP		2-12N·m	
QSPCAFH		10-30N·m	
QSPFH/CSPFH		5-420N·m	420N·m ~ *
QLFH/CLFH			* Upon request
PQLFH			
QSPFH50N3			
PCLFH w/ T-FHSL256		5-200N·m	
SPFH		3.5-310N·m	
RSPFH		4-310N·m	
RTDFH120CN w/Bit			
RNTDFH500CN w/Bit			
QSPFHP6N4			
CSPFHP3N4X8D w/QH			
QSPCAFHP12N			

### M-FD Module for FHD/FD/FDD series



Transfer actual applied torque data and ID for enhancing quality control. FDD added double tightening detection function.

### FHD/FD/FDD: Wireless Data Transfer Wrench

FHD/FD/FDD		2-280N·m	280N·m ~ *
FHD			* Upon request
FD/FDD			
CSPFHD50N3X12D w/QH			
CSPFDD25N3X10D w/QH			

### M-BLA/BLE Module for Solar Powered Series



Transfer tightening completion signal. The power is generated by the solar panel on the transmitter.

### BL: Solar Powered Counting Pokayoke

BLA/BLE		3.5-280N·m	420N·m ~ *
			* Upon request
CSPBLA25N3X10D w/ SH-N			

## Advantage of R-CM+M-FH with T-FHM transmitter

### New T-FH/T-FHM Transmitter



T-FH/T-FHM



Previous  
T-FH256MC

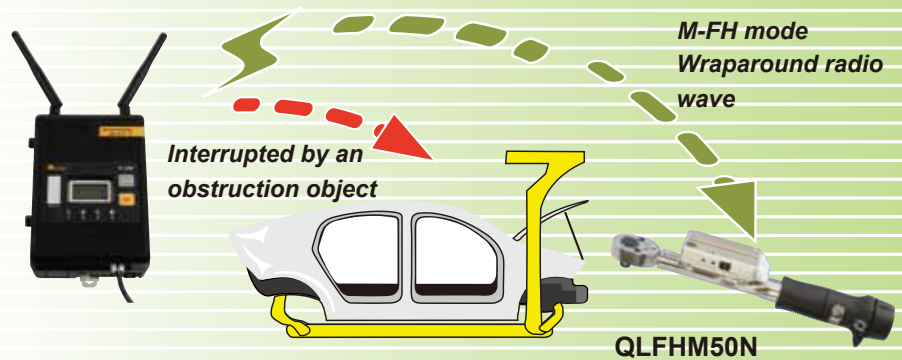


New  
T-FH/T-FHM



#### SB-FH2

Setting Box for New T-FH/T-FHM and existing FH series and FHD/FD/FDD. Setting software is available



### Difference of T-FH/T-FHM transmitter

**T-FH:** Compatible with previous FH series, it is set at R-FH mode as default.

**T-FHM:** For using advanced functions: wraparound radio wave and battery level alert M-FH mode as default.

※ SB-FH2 setting box is required to change M-FH / R-FH mode.

※ To use T-FH/T-FHM or R-CM together with previous FH series such as T-FH256MC/T-FHSLS256/T-FHP/RTDFH/RNTDFH transmitter or the receiver R-FH256, should be set at R-FH mode.

### Battery Alert

※ For T-FHM at M-FH mode

Outputs residual voltage value of T-FHM to R-CM. R-CM alerts when the voltage drops.

### Quick Pairing

※ For previous T-FH256MC and T-FH/T-FHM

Easily exchange modules

### Remote Setting

※ Not for M-FD, M-BLA/BLE

Changeable Group channel, ID and Judgment code remotely. Convenient when hardware is installed out of reach.

### Count Checker function

※ Not for M-FD



eg. Count 4

03, 02, 01 -



R-CM receiver has count checker function and it is available for the wrench set in Output 1.

Counting of the number of tightenings (1-99) is possible for the wrench output 1.

### Optional Extension devices



#### IO-CM

Expands 4 relay outputs, thus R-CM can be managed up to 8 relay outputs.

IO-CM



#### BZ-CM

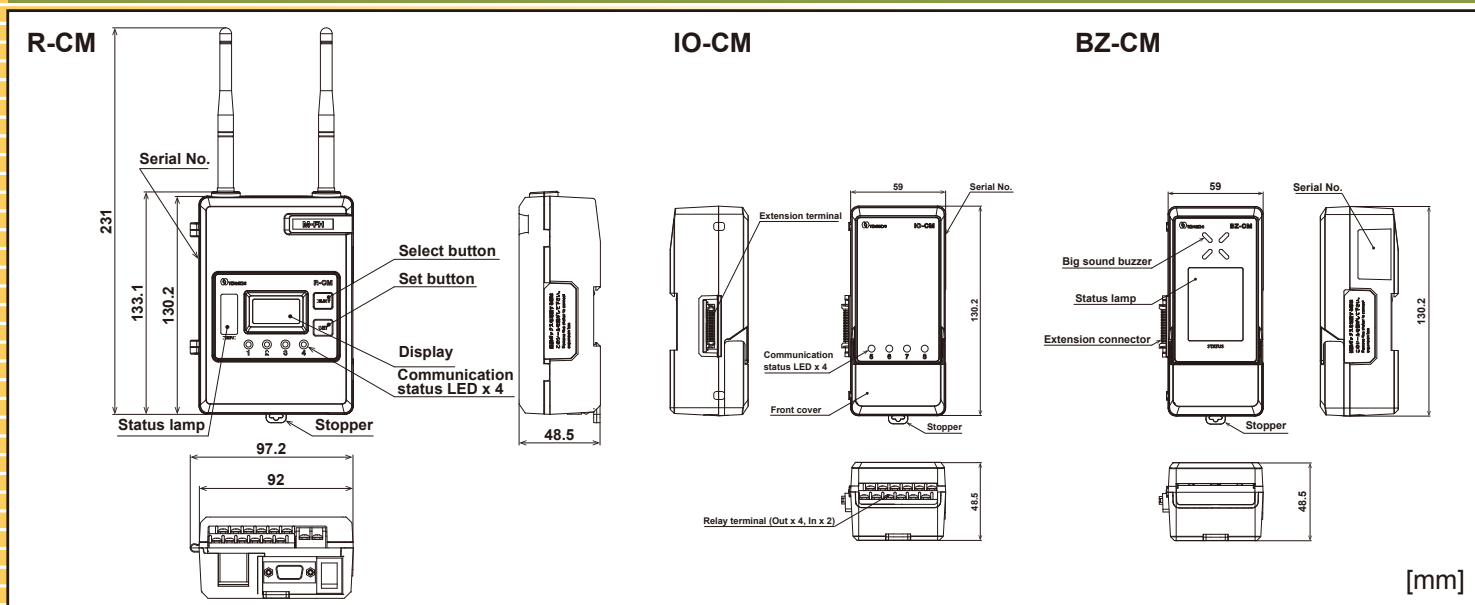
External loud volume buzzer and large lamp

※ Part No.1070, 280mm of DIN EN50022-35x7.5 rail and stoppers set come with R-CM receiver as standard accessory.

BZ-CM



## Dimensions



[mm]

## Specifications

Model	Receiver	Setting Box	Interchangeable Module			
	R-CM	SB-FH2	M-FH	M-FD	M-BLA	M-BLE
Frequency		2.402GHz-2.479GHz			902.875MHz	868.3MHz
Communication Modulation	Depend on the mounted module	Spread spectrum (FHSS)			-	
Group channel		GFSK			FSK	
ID		256 (000-255)			-	
Input, Output	Relayx4, RS232C	3-digits (000-999), 7-digits (alphanumeric) *3			8 Digits fixed, not selectable *3	
Input	LS signal, Reset	RS232C	-	-	-	-
Power supply	DC24V	DC9V alkaline x 1	-	-	-	-
Antenna	Depend on the mounted module	Dipole antenna	Diversity antenna		Dipole antenna	
Distance		M-FH mode: 10 to 30 m, R-FH mode 10 to 20 m*1 *2			10 to 20 m*1	
Temperature in use	0 - 50°C					
Weight (kg)	0.24	0.92	0.047	0.036	0.036	0.035
Applicable Transmitter	Depend on the mounted module	RTD/RNTDFH, FHP, FHSL256, T-FH256MC, T-FH/T-FHM*2, FHW, T-FD	RTD/RNTDFH, FHP, FHSL256, T-FH256MC, FHW, T-FH/T-FHM*1 *2	T-FD	T-BLA	T-BLE

**Note** \*1 Transmitting/receiving distance varies depending on surrounding radio environment.

\*2 M-FH mode is available for the newly updated T-FH/T-FHM transmitter which has white antenna cover. The previous transmitter, black antenna cover type has R-FH mode only.

\*3 Multiple wrenches can connect to one receiver as long as they do not signal at the exact same time.

- Contact Tohnichi for conditions of wireless certification acquisition for each country.
- An Ethernet terminal can be attached as an option for R-CM.

## Optional Accessories

IO-CM: Extension relay output box.

Part No.1070: DIN rail 280mm with stoppers

FHM-PCV: Protection cover for

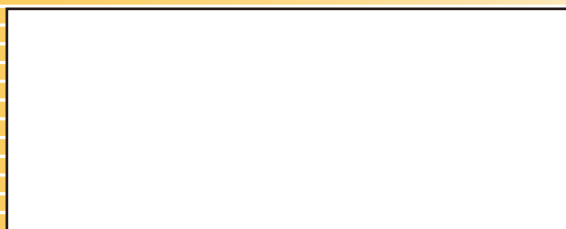
BZ-CM: Loud buzzer with large lamp

BA-8R: 100-240V AC adapter

T-FH/T-FHM transmitter



Promotional videos are available on YouTube. Visit Tohnichi TV!  
<https://www.youtube.com/c/TohnichiTV>



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