數位扭力扳手 *Digital Torque Wrench*

- **LCD背光顯示**
- **順時針及逆時針皆可操作**
- **峰值保持(K) 與扭力追隨(F)模式 (可訂製特殊K模式)**
- **四種扭力單位，可供選擇切換:N-m, kgf-cm, lbf-in, lbf-ft**
  WM-SD系列為三種扭力單位:cN-m, kgf-cm, in-lb
- **蜂鳴聲、LED燈警示(到達預設扭力值80%時)**
- **震動警示(到達預設扭力值90%時)**
- **省電模式：2分鐘自動關機（可訂製不關機模式）**
- **記錄使用次數、歷史最大扭力**
- **藍牙款:透過藍牙連線手機，隨時查詢歷史扭力紀錄(最多可瀏覽1000筆)**
  可透過Type-C將歷史扭力紀錄傳輸到電腦，以利品質控管

- LCD backlight display
- Both operator for cw, ccw
- Two modes : F(Track) / K(Peak)
- 4 units change: N-m, kgf-cm, lbf-in, lbf-ft (WM-SD series: cN-m, kgf-cm, in-lb)
- Warning function : Beep, LED indicator (When reach the torque setting value 80%)
- Vibration function : When reach the torque setting value 90%
- Automatically powers off when not in use for 2 minutes
  (The non-shutdown mode can be customized)
- Recording usage frequency and the historical maximum torque
- Bluetooth Type: Access historical data at any time through Bluetooth connection to the mobile phone.(View up to 1000 records) connect via Type-C to save data on the computer

mobile wrench

BT-APP

影片-藍牙款
Video-BT

電腦軟體-藍牙款
Software-BT

影片-標準款
Video

充電款技術規格 /Rechargeable Battery Technical Data (Battery : Standard 16650/ Mini 10440)			
電池壽命：充滿電操作時間 Battery life(fully charged used time)	8~10 hrs	充電輸入電壓 Charging Input Voltage	5V⎓1A
標稱電壓 Nominal Voltage	3.7V	內阻 Internal Resistance	< 60mΩ
充電時間 Recharge Time	Standard 90-120 mins / Mini 60-90 mins		
使用環境（溫度） Storage conditions (Temperature)	Recharge : 10℃~ 45℃ Discharge : -10℃ ~ 60℃ Storage : -20℃ ~ 25℃ (< 1 year) -20℃ ~ 40℃ (< 3 months) -20℃ ~ 50℃ (< 1 month)		
使用環境（濕度） Storage conditions (Humidity)	Work : 20% ~ 85%RH (not condensed) Storage : 40% ~ 85%RH (not condensed)		
標稱容量 Nominal Capacity	Standard 1600mAh / Mini 320mAh X2		
壽命測試 Lifetime Testing	電池標準充放電300次循環後高於容量80% Capacity remains above 80% after 300 standard charge-discharge cycles.		
內建雙重保護IC電路 Built-in Dual Protection IC Circuit	提供過壓充電、過壓放電、過流充電、過熱過載、短路等保護 Provides protection against over-voltage charging, over-voltage discharging, over-current charging, overheating, overload, and short circuits.		

電池款技術規格 / Dry Cell Technical Data			
電池壽命：持續操作 Battery Llife (continuous operation)	110 hrs (WS: 37 hrs)	操作溫度 Operating temperature	-10℃~ 60℃
電池壽命：待機模式 Battery Llife (Standard Mode)	1 year	儲存溫度 Storage temperature	-20℃~70℃
濕度 Humidity	無凝露可到90% Up to 90% (not condensed)		

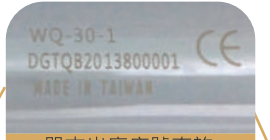
共用規格 / Common Specification			
預設值儲存組數 No. of memory parameters	30		
LED警示燈	2(1Green + 1Red)		
震動警示 Vibration Warning	YES(到達預設扭力90%，震動警示啟動) (Activate when set value reaches 90%)		
操作模式 Operating modes	峰值保持(K) / 追隨模式 (F) / 角度模式 (A) Peak hold (K) / Track (F) / Angle (A)		
單位選擇 Torque Units	Nm, kg-cm, lb-ft, lb-in (WM-SD series: cNm, kg-cm, lb-in)		
掉落測試 Drop test	1m		
振動測試 Shaking test	10G(10Hz→55Hz→10Hz/0.8mm)		
耐用度 Durability	Over 10000 cycles		
環境測試 Environmental test	PASS	電磁相容測試 EMC test	PASS

功能說明 Function Description

WQ (-BT)
WA

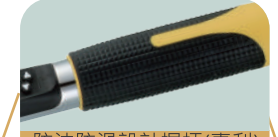
快速脫離
Qucik release

棘輪切換
Reversible ratchet



單支出廠序號查詢
Unique code for each wrench

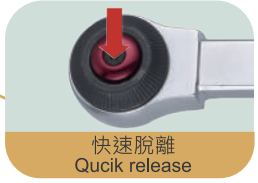
LED提醒/蜂鳴警示
LEDs(Green/Red)/Buzzer



防油防滑設計握柄(專利)
Non-slip grip handle(patent)

震動警示功能
Vibration function

WI (-BT)



快速脫離
Qucik release

棘輪切換
Reversible ratchet

棘輪方頭/插槽
Square head / Socket

功能說明 Function Description

藍牙充電款：內建電芯保護特規電池，請勿自行更換市售充電電池
Bluetooth Type：Built-in battery with special specifications for cell protection, please do not replace it with commercially available rechargeable batteries.

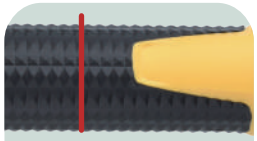
功能說明 Function Description

WM-Q(-BT)	WM-I(-BT)	WM-SD(-BT)	WM-B(-BT)
棘輪切換 Reversible ratchet	棘輪切換 Reversible ratchet	強磁吸附 Magnetic adsorption	棘輪切換 Reversible ratchet
棘輪方頭 Square head	棘輪方頭/插槽 Square head / Insert	Bit 六角插槽 Bit Insert(Hex)	Bit 六角插槽 Bit Insert(Hex)
快速脫離 Qucik release	快速脫離 Qucik release	前拉脫離 Front pull out	夾持設計 Clamping Mechanism

功能說明 Function Description

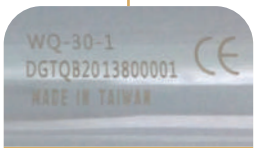
藍牙充電款：①電源重置
②USB插頭(Type C)
Bluetooth Type：①Reset
②USB insert(Type C)

震動警示功能
Vibration function



校正定位點
Calibration point

防油防滑設計握柄(專利)
Non-slip grip handle(patent)



單支出廠序號查詢
Unique code for each wrench

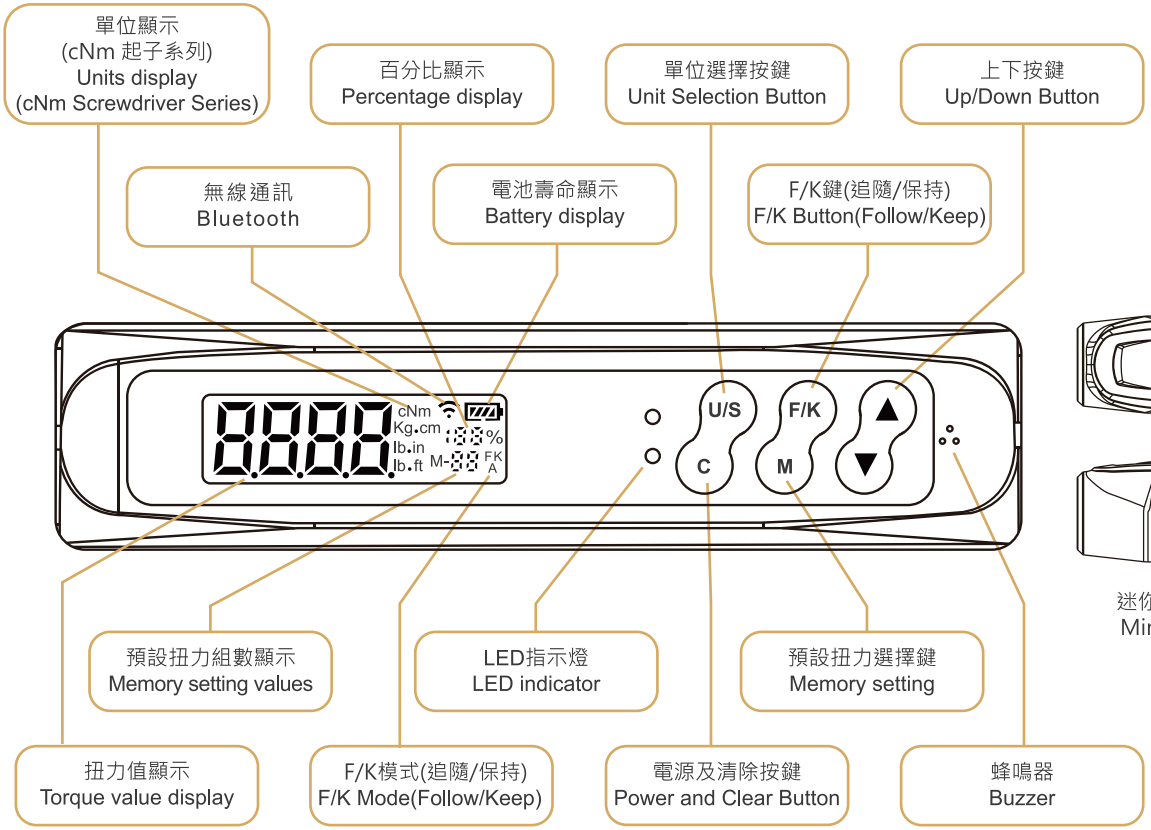
簡易操作
Use friendly

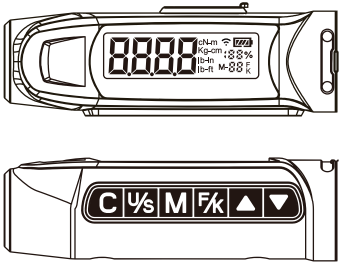
LED提醒/蜂鳴警示
LEDs(Green/Red)/Buzzer

電池款-使用AAA*2電池
藍牙款-使用10440電池
Battery Type-AAA*2 batteries
Bluetooth Type-10440 battery

藍牙充電款：內建電芯保護特規電池，請勿自行更換市售充電電池
Bluetooth Type：Built-in battery with special specifications for cell protection, please do not replace it with commercially available rechargeable batteries.

面板說明 Panel Description





迷你型控制按鈕及顯示面板
Mini control buttons and display panel

一般型 - 數位扭力扳手 Digital Torque Wrench

棘輪方頭
Drive

WQ-200-3

- 配件：收納用鐵製工具盒x1, 出廠校驗報告(符合ISO品質認證規範)x1, 說明書(中/英)x1, AA電池x2
- Content : Storage steel box x1, Certificate of calibration report x1, User guide(Bilingual) x1

SPECIFICATIONS:

※Unit Conversion : 1 Nm = 10.2 kgf-cm = 0.738 lbf-ft = 8.851 lbf-in

產品編號 Item No. 電池款 Battery Type	精度 Accuracy	棘輪方頭 Drive	棘輪齒數 Ratchet Teeth	顯示及設定範圍 Setting Range	建議使用範圍 Suggested Range	解析度 Resolution	扳手長度 Length(mm)	扳手重量 Weight(±50g)
WQ-30-1	CW:±1.5% CCW:±2.5%	1/4”	72	1.5~30 Nm	4.5~30 Nm	0.01 Nm	410	720
WQ-30-2		3/8”						740
WQ-60-2				3~60 Nm	9~60 Nm			
WQ-135-2				6.8~135 Nm	20~135 Nm	0.1 Nm	434	890
WQ-135-3		1/2”					454	1080
WQ-200-3				10~200 Nm	30~200 Nm		565	1300
WQ-340-3				17~340 Nm	50~340 Nm		666	1420
WQ-600-4		3/4”	24	30~600 Nm	90~600 Nm		940	3800
WQ-800-4				40~800 Nm	120~800 Nm		1235	4800
WQ-1000-4				50~1000 Nm	150~1000 Nm	1 Nm		

註：精度的扭力範圍在最大操作值的20%~100%

Notes: Accuracy guaranteed at 20% to 100% of full scale.