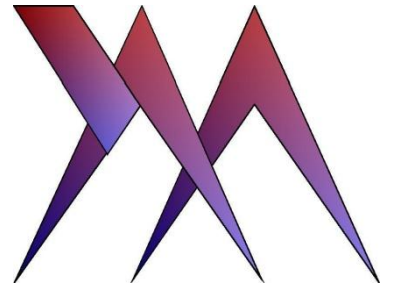


MasTec Limited
The Ingenious Device Company



RURAL TECH

Product Catalogue

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SINGLE PHASE TO THREE PHASE MOTOR STARTER AND CONTROLLER

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MasTec Limited

Unit 1 --- 7 Torrens Rd, East Tamaki
Auckland 2013 New Zealand

Tel : 64 9 273 4200

Fax: 64 9 273 9500

Mail : info@mastecnz.co.nz

Web <http://www.mastec.co.nz>



Product description

NZ made and designed technology will start and run 3-phase motors either off a small low cost single phase generator, any single phase AC mains supply or inverter.

Features

- Will start motors to power company standards without compromising performance.
- Starts the motor “off line” and then disconnects the starter section from the motor when the motor is started. Voltage drop on the AC power supply is minimized with this process, allowing the motor to start with full voltage, not labouring with under voltage.
- This results in lower transient in-rush currents for significantly shorter times than other starting methods
- Prevents heat build up in the motor.
- A motor can have unlimited starts per hour without risk of damage.
- Allows the motor to be single phase fuse protected.
- Confirms when a motor is started.
- Can solve problem motor starting.
- Can start motors on power supplies where voltage drop may prevent other motor starters from being successful.
- Fastec Start contains a microprocessor, and I/O and Bluetooth capability that make it possible to customise for the inclusion of control operations, such as pump controllers.
- Lower cost, lower line tariff costs, easy installs.

Applications

Well pumps, water blasters, standard pumps, fans, presses and compressors
 Refrigeration and chiller, conveyor drives, workshop machinery
 Car stackers, meat grinders, pipe benders

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 Auckland 2013 New Zealand
 Tel : 64 9 273 4200
 Fax: 64 9 273 9500
 Mail : info@mastecnz.co.nz
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FOOD SAFETY, MEDICAL, VETERINARY LOGGERS



Product description
Features

T20 is a wireless alarm, monitoring and logger both temperature & humidity

- It has three sensors, ambient temperature and humidity plus another temperature probe on a cable.
- Besides being a monitor, logger and alarm, it can also control and be used as a thermostat.
- SMS operation- data and configuration queries can be done via SMS- You can monitor and receive Alarms on your mobile via SMS Text messaging and you can also assign 9 more mobile users.
- Highly configurable and easy to use remotely.
- Logged historic temperature and humidity data can be downloaded with Wifi or GPRS for archiving or analysis.

Applications

Freezer, chiller, hot water, growth chambers, greenhouse, warehouse etc.



Product:

Minnow Logger

Features:

- Temperature is measured to an accuracy of +/-0.3C over the range +5C to +60C and +/-2.0C over the full range -- 30C to +80C. Relative humidity is measured to an accuracy of +/-2.0% over 20% to 80% humidity range and +/-4.0% over 0% to 100%. Both temperature and relative humidity are logged at a user configurable logging rate which can be set in a PC application program.
- Minnow is available with an optional NIST traceable single point calibration at any temperature between 15C and 35C or 0C. Once calibrated the Minnow is accurate to +/- 0.1C within +/- 20C of the calibration point.
- Can set operating ranges above or below which light indicators will be activated so that the user can become aware that the desired transportation conditions have been exceeded.
65520 storage items each of which is a time-stamped recording of temperature and humidity.
- Long Battery Life
- Simple to use PC Application
- Moisture Resistance

Applications:

- Sensitive/ Fragile items
- Food
- Animal/Livestock
- Plants
- Chemical
- Medicine or Organs

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Product:	Bluefin Logger
Features:	<ul style="list-style-type: none"> • Temperature is measured to an accuracy of +/-0.3C over the range +5C to +60C and +/-2.0C over the full range --30C to +80C. Relative humidity is measured to an accuracy of +/-2.0% over 20% to 80% humidity range and +/-4.0% over 0% to 100%. Both temperature and relative humidity are logged at a user configurable logging rate which can be set in a PC application program. • Bluefin is available with an optional NIST traceable single point calibration at any temperature between 15C and 35C or 0C. Once calibrated the Minnow is accurate to +/- 0.1C within +/- 20C of the calibration point. • Can set operating ranges above or below which light indicators will be activated so that the user can become aware that the desired transportation conditions have been exceeded. • Has provision for 40,000 data samples. This can be 20,000 temperature and humidity pairs, 40,000 temperature only samples or 40,000 humidity only samples. • Rechargeable Battery • Can be connected either via a USB cable to a Windows or Mac PC or wirelessly using Bluetooth to your iPhone, iPad or iPadMini. Both Windows, Mac and iPhone application offer a simple means of configuring the logger, data extraction and data viewing features. • Moisture Resistance
Applications:	<ul style="list-style-type: none"> • Transport of sensitive/ fragile items • Food transportation • Storage of vaccines • Monitoring storage of chemicals • Animal/livestock transportation • Shipping



Product:	ZOGLAB Mini data logger for temperature & humidity
Features:	<ul style="list-style-type: none"> • Small size for more applications • Key design for on-site query • LCD with wider viewing angle and more redundant • Temperature range in normal operation • Safety design, strict EMC test • Alarm mark
Application:	<ul style="list-style-type: none"> • Pharmaceutical, laboratory, agriculture, collections Food and Tobacco, network monitoring system



Product:	EL-21CFR-2-LCD Temperature, Humidity & Dew Point Data Logger with LCD Screen
Features:	<ul style="list-style-type: none"> • EasyLog 21CFR Software available as a free download. • -35 to +80°C (-31 to +176°F) and 0 to 100%RH measurement range. • Logging rates between 10 seconds and 12 hours. • High contrast LCD, with two and a half digit temperature and humidity display function. • Immediate, delayed and push-to-start logging. • Use as part of a 21CFR Part 11 compliant system
Application:	<ul style="list-style-type: none"> • Pharmaceutical fridge monitoring • Environmental and weather monitoring • Agricultural and livestock • Food & drink • Building & site monitoring • HVAC

Product: **EL-GFX-2
Temperature and Relative Humidity Data Logger
with Graphic LCD Screen**

Features: -30 to +80°C and 0 to 100% RH measurement ranges
 Logging rates between 10 seconds and 1 hour
 Immediate, delayed, push-button or temperature/RH triggered start mode
 Graphic LCD shows real-time readings, graph and current status
 Stores over 250,000 readings
 Calibration certificate available

Application:

- Pharmaceutical fridge monitoring
- Transportation
- Food & drink
- Building & site monitoring
- HVAC



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MONITOR AND CONTROL SYSTEMS

Product	Application
5005 Wireless Digital Controller (2Di / 2Do)	door access, gate controller, remote equipment switching, car parking system, power failure alarm, water Leak / flood detection
5010 Wireless Digital Controller (4Di / 4Do)	
5110 Advanced Wireless Digital Controller (4Di / 4Do)	
5011 Wireless Analog and Digital Controller (8Di / 8Do / 4Ai)	heating and air conditioning in holiday homes, lighting, engine pre-heaters, aviation engine heaters, irrigation systems, water well pumps, pumping stations, cabin heaters, power cycle and reboot of remote servers, routers and computers.
5111 Advanced Wireless Digital Controller (8Di / 8Do / 4Ai)	wind data, anemometer, energy logger
5002-1 Advanced Industrial Wireless Controller (4Di / 4Do)	generator, motor operation, parameter monitoring, lighthouses and navigation mark
5002-2 Advanced Industrial Wireless Controller (8Di / 8Do / 4Ai)	factory automation, environmental monitoring and remote device management for M2M industry
5016 Wireless Data Logger & Controller (4Di / 4Do / 4Ai / 4Ti)	temperature data logger- laboratory, refrigerators, chillers
5019 Hydrology Data Acquisition System (2Di / 2Do / 1Ro / 4Ai / 2 Ci/ 2 GCi)	water-level monitor, rainfall collection, data acquisition

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Auckland 2013 New Zealand
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Fax: 64 9 273 9500
Mail : info@mastecnz.co.nz
Web <http://www.mastec.co.nz>

5005 Wireless Digital Controller

(2Di / 2Do)

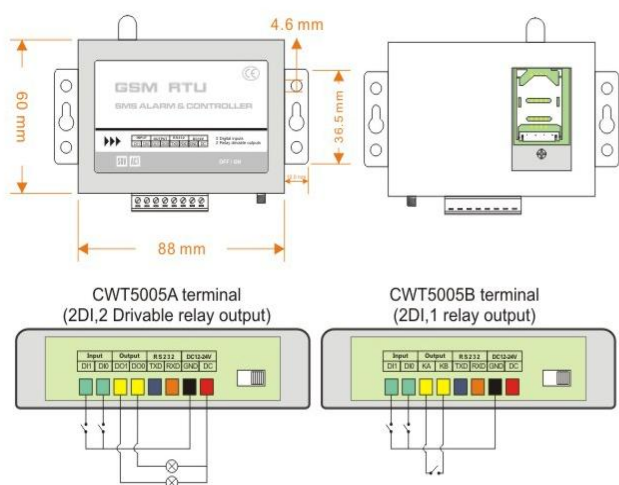
CWT5005 GSM RTU



Simple and easy to use
GSM alarm and controller
GSM remote switch

Monitor 2 digital inputs
alarm via sms
Control 2 outputs via sms

Specifications	
DC Power supply	12-24V DC (Standard adapter: DC 12V/1.5A)
Power consumption	12V input Max. 150mA/Average 50mA
Frequency range	Quad-frequency 900/1800/850/1900MHz
SIM Card	Supporting 3V&1.8V SIM Card
Antenna	50 Ω SMA Antenna interface
Communication interface	RS-232C
Working temperature	-30°C ~ +70°C
Working humidity	Relative humidity 95%
Digital input	2 Digital inputs (dry contact)
Output	CWT5005A: 2 Drivable relay outputs (open-collector outputs)
Output	CWT5005B: 1 relay output (3A, 220Vac)
Output drive voltage	Equal to input DC voltage
Output drive power	Drive voltage ≤35V, drive current ≤500mA
Exterior dimension	88×60×25mm
Weight	150G



Digital inputs features	Relay drivable outputs features
<ul style="list-style-type: none"> • NO or NC type can be preset • Configurable for alarm and recover sms • Configurable for alarm ensure time • Configurable for alarm delay time • Configurable for service number's authority of receive inputs alarm • Remote query inputs status 	<ul style="list-style-type: none"> • Can drive relays/siren/door switch, etc • Remote On/Off/Pulse outputs • Configurable for pulse time • Remote query outputs status • Outputs can be activated by alarm • Outputs can be activated by call • Outputs can be activated on schedule

Advance features

- Configurable for alarm and recover sms
- Automatically report the status of itself on schedule
- Support remote setting via sms commands
- Preset 10 phone numbers(can be distributed authority)
- Remote add/edit/delete phone group
- Automatically update internal clock via sms
- Time stamped in alarm or recover messages
- Support ring call when alarm
- Temperature sensor (optional)
- Internal battery (optional)
- Easy used GUI configure software
- Adopted highly integrated industrial CPU
- Reliable performance with built-in double watchdog
- Low maintenance, 24×7 operation

How to setup

- Can be setup by free PC software via serial port
- Can be setup by cell phone via sms commands



When does GSM RTU send sms

- Digital inputs are triggered
- Send command via serial port
- Manual request by sms command
- External DC power off or recover
- On schedule, such as daily report, etc

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Unit 1 --- 7 Torrens Rd, East Tamaki
Auckland 2013 New Zealand

Tel : 64 9 273 4200

Fax: 64 9 273 9500

Mail : info@mastecnz.co.nz

Web <http://www.mastec.co.nz>

5010 Wireless Digital Controller

(4Di / 4Do)

» CWT5010 GSM RTU

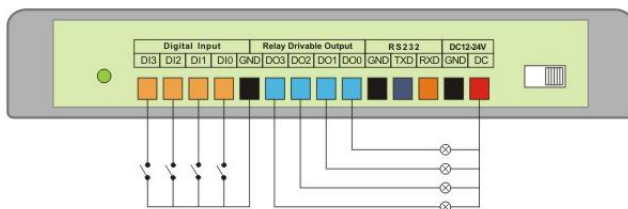
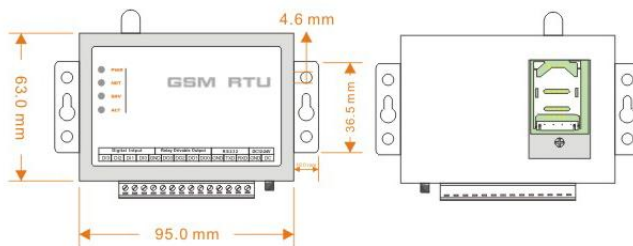


Monitor 4 digital inputs
alarm via sms
Control 4 outputs via sms

■ Specifications

DC Power supply	12-24V DC (Standard adapter: DC 12V/1.5A)
Power consumption	12V input Max. 150mA/Average 50mA
Frequency range	Quad-frequency 900/1800/850/1900MHz
SIM Card	Supporting 3V&1.8V SIM Card
Antenna	50 Ω SMA Antenna interface
Communication interface	RS-232C
Working temperature	-30°C ~ +70°C
Working humidity	Relative humidity 95%
Digital input	4 Digital inputs (dry contact)
Output	4 Drivable relay outputs (open-collector outputs)
Output drive voltage	Equal to input DC voltage
Output drive power	Drive voltage ≤35V, drive current ≤500mA
Exterior dimension	95×63×25mm
Weight	256G

■ Applications



■ 4 digital inputs features

- NO or NC type can be preset
- Configurable for alarm and recover sms
- Configurable for alarm ensure time
- Configurable for alarm delay time
- Configurable for service number's authority of receive inputs alarm
- Remote query inputs status

■ 4 relay drivable outputs features

- Multiple output type can be preset
- Remote On/Off/Pulse outputs
- Configurable for pulse time
- Remote query outputs status
- Outputs can be activated by alarm
- Outputs can be activated by call
- Outputs can be activated on schedule

⇒ Advance features

- Configurable for alarm and recover sms
- Automatically report the status of itself on schedule
- Support remote setting via sms commands
- Preset 10 phone numbers (can be distributed authority)
- Remote add/edit/delete phone group
- Automatically update internal clock via sms
- Time stamped in alarm or recover messages
- Support ring call when alarm
- Temperature sensor (optional)
- Internal battery and providing power cut off alarm
- Easy used GUI configure software
- Adopted highly integrated industrial CPU
- Reliable performance with built-in double watchdog
- Can execute preset tasks by re-defined conditions
- Low maintenance, 24×7 operation

⇒ How to setup

- Can be setup by free PC software via serial port
- Can be setup by cell phone via sms commands



⇒ When does GSM RTU send sms

- Digital inputs are triggered
- Send command via serial port
- Manual request by sms command
- External DC power off or recover
- On schedule, such as daily report, etc

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Auckland 2013 New Zealand

Tel : 64 9 273 4200

Fax: 64 9 273 9500

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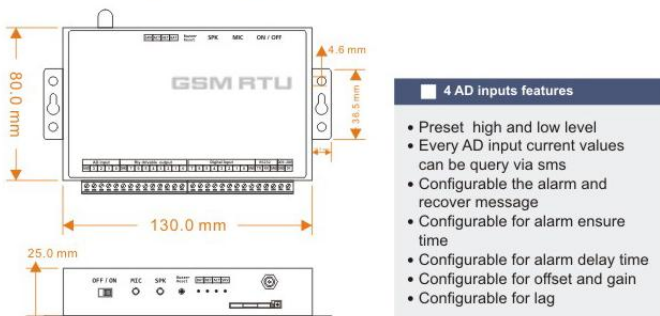
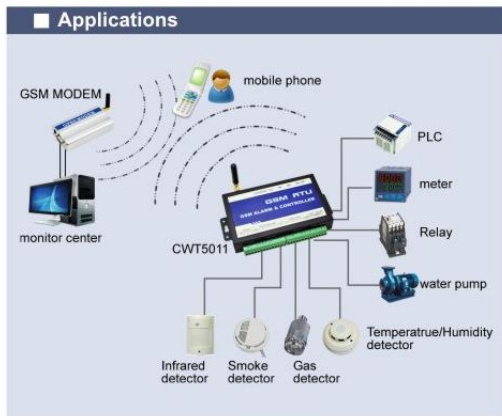
Web <http://www.mastec.co.nz>

5011 Wireless Analog and Digital Controller (8Di / 8Do / 4Ai)

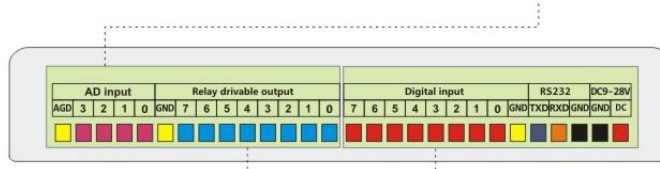
» CWT5011 GSM RTU



■ Specifications	
DC Power supply	12-24V DC (Standard adapter: DC 12V/1.5A)
Power consumption	12V input Max. 150mA/Average 50mA
Frequency range	Quad-frequency 900/1800/850/1900MHz
SIM Card	Supporting 3V&1.8V SIM Card
Antenna	50 Ω SMA Antenna interface
Communication interface	RS-232C
Working temperature	-30°C ~ +70°C
Working humidity	Relative humidity 95%
Digital input	8 Digital inputs (dry contact)
Analog input	4 Analog inputs (4~20mA or 0~5V)
Output	8 Drivable relay outputs (open-collector outputs)
Output drive voltage	Equal to input DC voltage
Output drive power	Drive voltage ≤35V, drive current ≤500mA
Audio interface	3.5mm audio in and audio out
Exterior dimension	130×80×25mm
Weight	370G



- 4 AD inputs features
- Preset high and low level
 - Every AD input current values can be query via sms
 - Configurable the alarm and recover message
 - Configurable for alarm ensure time
 - Configurable for alarm delay time
 - Configurable for offset and gain
 - Configurable for lag



- 8 relay drivable outputs features
- Multiple output type can be preset
 - Remote On/Off/Pulse outputs
 - Configurable for pulse time
 - Remote query outputs status
 - Outputs can be activated by alarm
 - Outputs can be activated by call
 - Outputs can be activated on schedule

- 8 digital inputs features
- NO or NC type can be preset
 - Configurable for alarm and recover sms
 - Configurable for alarm ensure time
 - Configurable for alarm delay time
 - Configurable for service number's authority of receive inputs alarm
 - Remote query inputs status

- Advance features
- Configurable for alarm and recover sms
 - Automatically report the status of itself on schedule
 - Support remote setting via sms commands
 - Preset 10 phone numbers(can be distributed authority)
 - Remote add/edit/delete phone group
 - Automatically update internal clock via sms
 - Time stamped in alarm or recover messages
 - Support ring call when alarm
 - Audio in and audio out can connect speak and mic
 - Temperature sensor (optional)
 - Internal battery and providing power cut off alarm
 - Easy used GUI configure software
 - Adopted highly integrated industrial CPU
 - Reliable performance with built-in double watchdog
 - Can execute preset tasks by re-defined conditions
 - Low maintenance, 24×7 operation
- How to setup
- Can be setup by free PC software via serial port
 - Can be setup by cell phone via sms commands
- When does GSM RTU send sms
- Digital inputs are triggered
 - AD inputs are above preset range
 - Send command via serial port
 - Manual request by sms command
 - External DC power off or recover
 - On schedule, such as daily report, etc

5110 Advanced Wireless Digital Controller

(4Di / 4Do)

» CWT5110 GPRS RTU



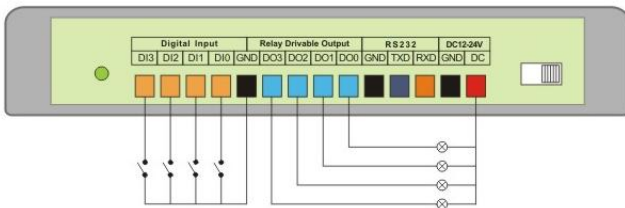
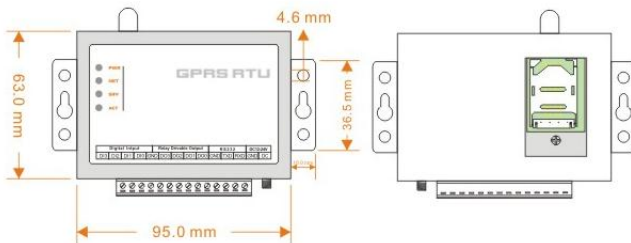
Reliable GPRS connection providing fast and cost-effective long-range wireless communication

Monitor 4 digital inputs
Control 4 outputs
via GPRS & SMS

■ Specifications

DC Power supply	12-24V DC (Standard adapter: DC 12V/1.5A)
Power consumption	12V input Max. 150mA/Average 50mA
Frequency range	Quad-frequency 900/1800/850/1900MHz
SIM Card	Supporting 3V&1.8V SIM Card
Antenna	50 Ω SMA Antenna interface
Communication interface	RS-232C
Working temperature	-30°C ~ +70°C
Working humidity	Relative humidity 95%
Digital input	4 Digital inputs (dry contact)
Output	4 Drivable relay outputs (open-collector outputs)
Output drive voltage	Equal to input DC voltage
Output drive power	Drive voltage ≤35V, drive current ≤500mA
Exterior dimension	95×63×25mm
Weight	256G

■ Applications



■ 4 digital inputs features

- Upload data when inputs are triggered
- Upload input status on schedule
- Can be reuse as pulse counter input
- SMS alarm when inputs are triggered
- NO or NC type can be preset
- Configurable for alarm and recover sms
- Remote query inputs status

■ 4 relay drivable outputs features

- Multiple output type can be preset
- Remote On/Off/Pulse outputs via GPRS
- Configurable for pulse time
- Remote query outputs status
- Outputs can be activated by alarm
- Outputs can be activated by call
- Outputs can be activated on schedule

➤ Advance features

- Support ring call when alarm
- Temperature sensor (optional)
- Internal battery and providing power cut off alarm
- Easy used GUI configure software
- Adopted highly integrated industrial CPU
- Reliable performance with built-in double watchdog
- Low maintenance, 24×7 operation

➤ How to setup

- Can be setup by free PC software via serial port
- Can be setup by cell phone via sms commands

➤ Where does GPRS RTU upload data to

- Support connects 4 servers, the servers must connect internet and have static public IP address or Dynamic Domain name
- GPRS Transmission base on TCP/IP
- Support modbus TCP protocol or CWT_IO protocol

➤ When does GPRS RTU upload data

- GPRS RTU start up
- Digital inputs are triggered
- On schedule(day/minute/second)
- Query by server

➤ SMS features

- Preset 10 phone numbers(can be distributed authority)
- Time stamped in alarm or recover messages
- Support remote setting and control via sms commands

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Auckland 2013 New Zealand

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Fax: 64 9 273 9500

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5111 Advanced Wireless Digital Controller

(8Di / 8Do / 4Ai)

CWT5111 GPRS RTU



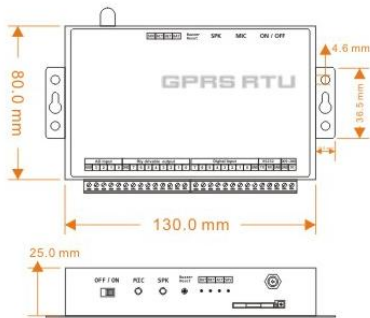
Reliable GPRS connection providing fast and cost-effective long-range wireless communication

Monitor 8 digital inputs
Monitor 4 analog inputs
Control 8 outputs

Specifications

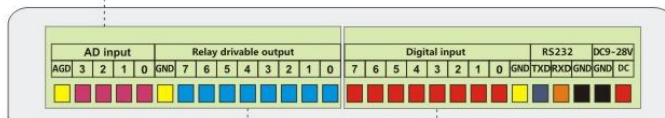
DC Power supply	12-24V DC (Standard adapter: DC 12V/1.5A)
Power consumption	12V input Max. 150mA/Average 50mA
Frequency range	Quad-frequency 900/1800/850/1900MHz
SIM Card	Supporting 3V&1.8V SIM Card
Antenna	50 Ω SMA Antenna interface
Communication interface	RS-232C
Working temperature	-30°C ~ +70°C
Working humidity	Relative humidity 95%
Digital input	8 Digital inputs (dry contact)
Analog input	4 Analog inputs (4~20mA or 0~5V)
Output	8 Drivable relay outputs (open-collector outputs)
Output drive voltage	Equal to input DC voltage
Output drive power	Drive voltage ≤35V, drive current ≤500mA
Audio interface	3.5mm audio in and audio out
Exterior dimension	130×80×25mm
Weight	370G

Applications



4 AD inputs features

- Can preset normal range for AD input, upload data to server when above the normal range.
- Every AD input current values can be query via command
- Configurable for the SMS alarm and recover message
- Configurable for alarm ensure time
- Configurable for alarm delay time
- Configurable for offset and gain



8 relay drivable outputs features

- Multiple output type can be preset
- Remote On/Off/Pulse outputs via GPRS
- Configurable for pulse time
- Remote query outputs status
- Outputs can be activated by alarm
- Outputs can be activated by call
- Outputs can be activated on schedule

8 digital inputs features

- Upload data when inputs are triggered
- Upload input status on schedule
- Can be reuse as pulse counter input
- SMS alarm when inputs are triggered
- NO or NC type can be preset
- Configurable for alarm and recover sms
- Remote query inputs status

Advance features

- Adopted highly integrated industrial CPU
- Reliable performance with built-in double watchdog
- Low maintenance, 24×7 operation
- Audio in and audio out can connect speak and mic
- Temperature sensor (optional)
- Internal battery and providing power cut off alarm
- Easy used GUI configure software

How to setup

- Can be setup by free PC software via serial port
- Can be setup by phone number via sms commands

Where does GPRS RTU upload data to

- Support connects 4 servers, the servers must connect internet and have static public IP address or Dynamic Domain name
- GPRS Transmission base on TCP/IP
- Support modbus TCP protocol or CWT_IO protocol

When does GPRS RTU upload data

- GPRS RTU start up
- Digital inputs are triggered
- AD input above preset rang
- the change of AD input above preset value
- On schedule(day/minute/second)
- Query by server

SMS features

- Preset 10 phone numbers(can be distributed authority)
- Time stamped in alarm or recover messages
- Support remote setting and control via sms commands

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Auckland 2013 New Zealand

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Fax: 64 9 273 9500

Mail : info@mastecnz.co.nz

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5002-1 Advanced Industrial Wireless Controller

(4Di / 4Do)

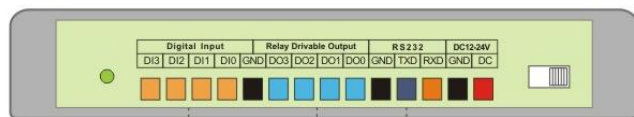
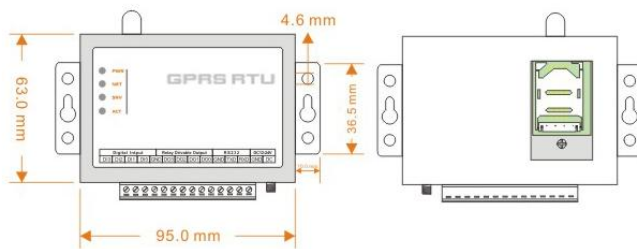
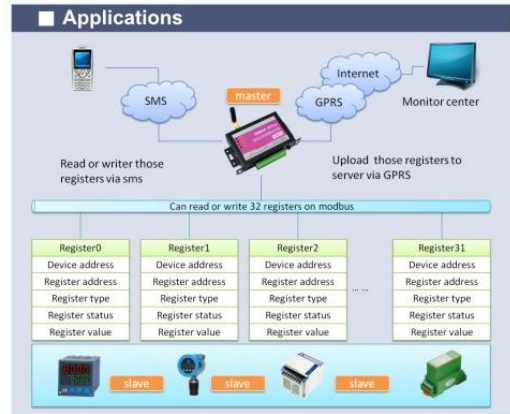
» CWT5002-1 MODBUS GPRS RTU



Reliable GPRS connection providing fast and cost-effective long-range wireless communication

Monitor 4 digital inputs
Control 4 outputs
Monitor modbus device via GPRS & SMS

Specifications	
DC Power supply	12-24V DC (Standard adapter: DC 12V/1.5A)
Power consumption	12V input Max. 150mA/Average 50mA
Frequency range	Quad-frequency 900/1800/850/1900MHz
SIM Card	Supporting 3V&1.8V SIM Card
Antenna	50 Ω SMA Antenna interface
Communication interface	RS-232C, MODBUS RTU(master or slave)
Working temperature	-30°C ~ +70°C
Working humidity	Relative humidity 95%
Digital input	4 Digital inputs (dry contact)
Output	4 Drivable relay outputs (open-collector outputs)
Output drive voltage	Equal to input DC voltage
Output drive power	Drive voltage ≤35V, drive current ≤500mA
Exterior dimension	95×63×25mm
Weight	256G



4 digital inputs features 4 Outputs features Modbus features

- Upload data to server when inputs are triggered
- Upload input status to server on schedule
- Remote query inputs status by GPRS or SMS
- Can be reuse as pulse counter input
- Support SMS alarm when inputs are triggered
- NO or NC type can be preset
- Configurable for alarm and recover sms
- Multiple output type can be preset
- Remote On/Off/Pulse outputs via GPRS or SMS
- Configurable for pulse time
- Remote query outputs status by GPRS or SMS
- Outputs can be activated by alarm
- Outputs can be activated by call
- Outputs can be activated on schedule
- Modbus RTU protocol on Rs232, can monitor modbus slave device
- Read or write 32 registers (coil or input registers) on Modbus via GPRS or SMS
- Upload data to server when coils are triggered
- Can preset normal range for input registers, upload data to server when above the normal range
- Support SMS operation (read or write registers)

Advance features

- Support ring call when alarm
- Temperature sensor (optional)
- Internal battery and providing power cut off alarm
- Easy used GUI configure software
- Adopted highly integrated industrial CPU
- Reliable performance with built-in double watchdog
- Low maintenance, 24×7 operation

How to setup

- Can be setup by free PC software via serial port
- Can be setup by cell phone via sms commands

Where does GPRS RTU upload data to

- Support connects 4 servers, the servers must connect internet and have static public IP address or Dynamic Domain name
- GPRS Transmission base on TCP/IP
- Support modbus TCP protocol or CWT_IO protocol

When does GPRS RTU upload data

- GPRS RTU start up
- Digital inputs are triggered
- Modbus alarm
- On schedule(day/minute/second)
- Query by server

SMS features

- Preset 10 phone numbers(can be distributed authority)
- Time stamped in alarm or recover messages
- Support remote setting and control via sms commands

MasTec Limited

Unit 1 --- 7 Torrens Rd, East Tamaki
Auckland 2013 New Zealand
Tel : 64 9 273 4200
Fax: 64 9 273 9500
Mail : info@mastecnz.co.nz
Web <http://www.mastec.co.nz>

5002-2 Advanced Industrial Wireless Controller

(8Di / 8Do / 4Ai)

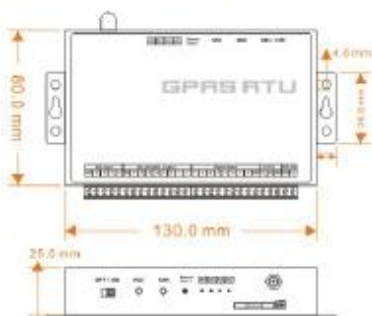
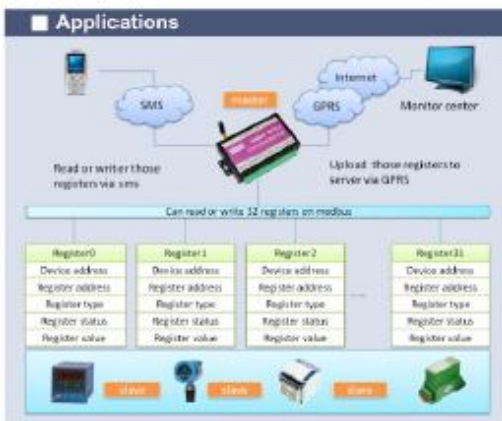
» CWT5002-2 MODBUS GPRS RTU



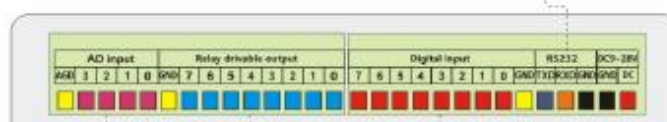
Reliable GPRS connection providing fast and cost-effective long-range wireless communication

Monitor modbus device
Monitor 8 digital inputs
Monitor 4 analog inputs
Control 8 outputs

■ Specifications	
DC Power supply	12-24V DC (Standard adapter: DC 12V/1.5A)
Power consumption	12V input: Max. 150mA/Average 50mA
Frequency range	Quad-frequency 900/1800/850/1900MHz
SIM Card	Supporting 3V&1.8V SIM Card
Antenna	50 Ω SMA Antenna interface
Communication interface	RS-232C, MODBUS RTU(master or slave)
Working temperature	-30°C ~ +70°C
Working humidity	Relative humidity 95%
Digital input	8 Digital inputs (dry contact)
Analog input	4 Analog inputs (I~20mA or 0~5V)
Output	8 Drivable relay outputs (open-collector outputs)
Output drive voltage	Equal to input DC voltage
Output drive power	Drive voltage ≤35V, drive current ≤500mA
Audio interface	3.5mm audio in and audio out
Exterior dimension	130×80×25mm
Weight	370G



- Modbus features
- Modbus RTU protocol on Rs232, can monitor modbus slave device
 - Read or write 32 registers (coil or input registers) on Modbus via GPRS or SMS
 - Upload data to server when coils are triggered
 - Can preset normal range for input registers, upload data to server when above the normal range
 - Support SMS operation (read or write registers)



- | | | |
|--|---|--|
| <p>■ 4 AD Inputs features</p> <ul style="list-style-type: none"> • Can preset normal range for AD input, upload data to server when above the normal range. • Current values can be query by server or sms • Configurable for alarm and recover SMS • Configurable for alarm ensure time • Configurable for alarm delay time • Support offset and gain | <p>■ 8 outputs features</p> <ul style="list-style-type: none"> • Multiple output type can be preset • Remote On/Off/Pulse outputs via GPRS or SMS • Configurable for pulse time • Remote query outputs status by GPRS or SMS • Outputs can be activated by alarm • Outputs can be activated by call • Outputs can be activated on schedule | <p>■ 8 digital Inputs features</p> <ul style="list-style-type: none"> • Upload data to server when inputs are triggered • Upload input status to server on schedule • Remote query inputs status by GPRS or SMS • Can be rouse as pulse counter input • Support SMS alarm when inputs are triggered • NO or NC can be preset • Configurable for alarm and recover sms |
|--|---|--|

- ☞ Advance features
- Adopted highly integrated industrial CPU
 - Reliable performance with built-in double watchdog
 - Low maintenance, 24×7 operation
 - Audio in and audio out can connect speak and mic
 - Temperature sensor (optional)
 - Internal battery and providing power cut off alarm
 - Easy used GUI configure software
- ☞ How to setup
- Can be setup by free PC software via serial port
 - Can be setup by phone number via sms commands
- ☞ Where does GPRS RTU upload data to
- Support connects 4 servers, the servers must connect internet and have static public IP address or Dynamic Domain name
 - GPRS Transmission base on TCP/IP
 - Support modbus TCP protocol or CWT_IO protocol
- ☞ When does GPRS RTU upload data
- GPRS RTU start up
 - Digital inputs are triggered
 - AD input above preset rang
 - The change of AD input above preset value
 - Modbus alarm
 - On schedule(day/minute/second)
 - Query by server
- ☞ SMS features
- Preset 10 phone numbers(can be distributed authority)
 - Time stamped in alarm or recover messages
 - Support remote setting and control via sms commands

5016 Wireless Data Logger & Controller

(4Di / 4Do / 4Ai / 4Ti)

» CWT5016 GPRS DATA LOGGER

Connect DS18B20 Temperature sensor



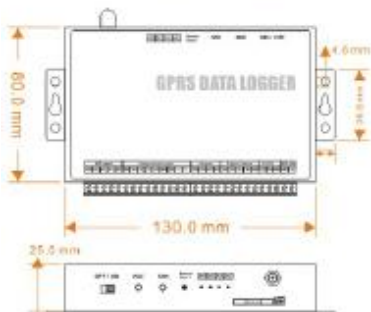
Reliable GPRS connection providing fast and cost-effective long-range wireless communication

Temperature monitor
Data acquisition
Alarm and control
Via GPRS or SMS

Specifications

DC Power supply	12-24V DC (Standard adapter: DC 12V/1.5A)
Power consumption	12V input Max. 150mA/Average 50mA
Frequency range	Quad-frequency 900/1800/850/1900MHz
SIM Card	Supporting 3V&1.8V SIM Card
Antenna	50 Ω SMA Antenna interface
Communication interface	RS-232C
Working temperature	-30°C ~ +70°C
Working humidity	Relative humidity 95%
Temperature input	4 DS18B20 inputs (temperature rang: -55°C ~ +125°C)
Digital input	4 Digital Inputs (dry contact)
Analog input	4 Analog inputs (4~20mA or 0~5V)
Output	4 Drivable relay outputs (open-collector outputs)
Audio interface	3.5mm audio in and audio out
Exterior dimension	130×80×25mm
Weight	370G

Applications



Temperature input features

- DS18B20 special input, 4 channels
- Temperature rang: -55°C ~ +125°C
- Preset high and low level to alarm
- Current temperature can be query by server via GPRS or sms
- Upload temperature on schedule

AD Input				Temperature Input				Output				Digital Output				RS232				DC9-28V			
AIN1	AIN2	AIN3	AIN4	TS1	TS2	TS3	TS4	DO1	DO2	DO3	DO4	DI1	DI2	DI3	DI4	TX	RX	TX	RX	V+	V-	GND	+

4 AD inputs features	Digital inputs features	Relay output features
<ul style="list-style-type: none"> • Can preset normal range for AD input, upload data to server when above the normal range. • Current values can be query by server or sms • Configurable for alarm and recover SMS • Support offset and gain 	<ul style="list-style-type: none"> • Upload status to server when inputs are triggered • Upload inputs status to server on schedule • Remote query inputs status by GPRS or SMS • Support SMS alarm • Configurable for alarm and recover sms 	<ul style="list-style-type: none"> • Remote On/Off/Pulse output via GPRS or SMS • Remote query output status by GPRS or SMS • Can be activated by alarm • Can be activated by call • Can be activated on schedule

Advance features

- Adopted highly integrated industrial CPU
- Reliable performance with built-in double watchdog
- Low maintenance, 24×7 operation
- Audio in and audio out can connect speak and mic
- Internal battery and providing power cut off alarm
- Easy used GUI configure software

How to setup

- Can be setup by free PC software via serial port
- Can be setup by phone number via sms commands

Where does GPRS RTU upload data to

- Support connects 4 servers, the servers must connect internet and have static public IP address or Dynamic Domain name
- GPRS Transmission base on TCP/IP
- Support modbus TCP protocol or CWT_IO protocol

When does GPRS RTU upload data

- GPRS RTU start up
- Temperature above preset rang
- Digital inputs are triggered
- AD input above preset rang
- the change of AD input above preset value
- On schedule(day/minute/second)
- Query by server

SMS features

- Preset 10 phone numbers(can be distributed authority)
- Time stamped in alarm or recover messages
- Support remote setting and control via sms commands

MasTec Limited

Unit 1 --- 7 Torrens Rd, East Tamaki
Auckland 2013 New Zealand

Tel : 64 9 273 4200

Fax: 64 9 273 9500

Mail : info@mastecnz.co.nz

Web <http://www.mastec.co.nz>

5019 Hydrology Data Acquisition System

(2Di / 2Do / 1Ro / 4Ai / 2 Ci/ 2 GCi)

» CWT5019 Hydraulic GPRS RTU



Specifically designed for remote Hydrological Data Acquisition System

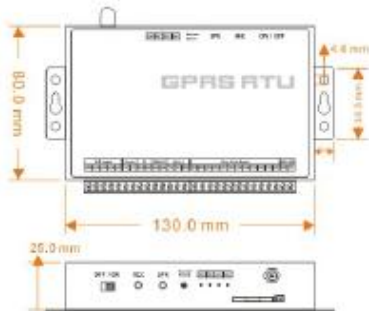
Reliable GPRS connection providing fast and cost-effective long-range wireless communication

Water-level monitor
Rainfall collection
Data acquisition
Alarm and control

■ Specifications

DC Power supply	12-24V DC (Standard adapter: DC 12V/1.5A)
Power consumption	12V input Max. 150mA/Average 50mA
Frequency range	Quad-frequency 900/1800/850/1900MHz
SIM Card	Supporting 3V&1.8V SIM Card
Antenna	50 Ω SMA Antenna interface
Communication interface	RS-232C
Working temperature	-30°C ~ +70°C
Working humidity	Relative humidity 95%
Gray code input	1 channel, 12-bit
Pulse counter input	2 channels, catch greater than 1ms Pulse
Digital input	2 Digital inputs (dry contact)
Analog input	4 Analog inputs (4~20mA or 0~5V)
Output	1 relay output (3A, 220Vac)
Internal Memory	16Mbits flash
Audio interface	3.5mm audio in and audio out
Exterior dimension	130×80×25mm
Weight	370G

■ Applications



■ Gray code input features

- 12-bit gray code input can connect water level gauge
- Upload data to server on schedule
- Configurable for measuring range
- Upload data to server when water level above preset change value

■ Pulse count input features

- Connect tipping-bucket raingauge, upload counter value to server on schedule
- Counter can catch greater than 100ms Pulse



■ 4 AD inputs features

- Can preset normal range for AD input, upload data to server when above the normal range.
- Current values can be query by server or sms
- Configurable for alarm and recover SMS
- Support offset and gain

■ Digital inputs features

- Upload status to server when inputs are triggered
- Upload inputs status to server on schedule
- Remote query inputs status by GPRS or SMS
- Support SMS alarm
- Configurable for alarm and recover sms

■ Relay output features

- Remote On/Off/Pulse output via GPRS or SMS
- Remote query output status by GPRS or SMS
- Can be activated by alarm
- Can be activated by call
- Can be activated on schedule

➤ Advance features

- Specifically designed for remote Hydrological Data Acquisition System base on GPRS
- Adopted highly integrated industrial CPU
- 16Mbits flash maintaining max.30 days period of data
- Reliable performance with built-in double watchdog
- Low maintenance, 24*7 operation
- Audio in and audio out can connect speak and mic
- Temperature sensor (optional)
- Internal battery and providing power cut off alarm
- Easy used GUI configure software

➤ How to setup

- Can be setup by free PC software via serial port
- Can be setup by phone number via sms commands

➤ Where does GPRS RTU upload data to

- Support connects 4 servers, the servers must connect internet and have static public IP address or Dynamic Domain name
- GPRS Transmission base on TCP/IP
- Support modbus TCP protocol or CWT_IO protocol

➤ When does GPRS RTU upload data

- GPRS RTU start up
- Water level above preset change value
- Rainfall value upload on schedule
- Digital inputs are triggered
- AD input above preset rang
- The change of AD input above preset value
- DI and AD data upload on schedule(day/minute/second)
- Query by server

➤ SMS features

- Preset 10 phone numbers(can be distributed authority)
- Time stamped in alarm or recover messages
- Support remote setting and control via sms commands

MasTec Limited

Unit 1 --- 7 Torrens Rd, East Tamaki
Auckland 2013 New Zealand

Tel : 64 9 273 4200

Fax: 64 9 273 9500

Mail : info@mastecnz.co.nz
Web <http://www.mastec.co.nz>

GPRS Wireless Level Monitoring System

Specifications

Remote Monitoring: Fuel Level, Volume, Temperature in Cargo Tanks . Real time report location, parameters of movement.

In General

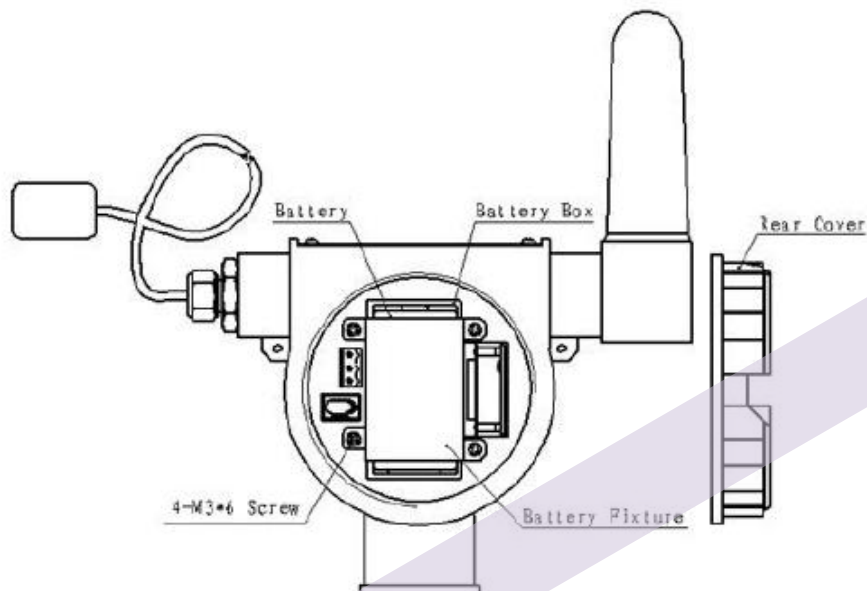
- ✧ Fully wireless tank level and temperature management system
- ✧ The maps data can be accessed to the user.
- ✧ Data transmitted by SMS or GPRS and integrated with software
- ✧ Non-rechargeable lipo battery or external power supply for power supply
- ✧ Very simple installation
- ✧ Remotely continues fuel cargo tanks monitoring
- ✧ Collect and store information for detailed analyzing



Description

The GPRS Wireless Tank Level system is a complete solution for the monitoring and management of tank. The system is built from the highest quality materials and is designed for very long service life. The system is simple to operate and extremely easy to install. The starter pack includes all necessary components to get the system operating and includes a comprehensive user guide.

The system works by very accurately measuring liquid pressure ($\pm 0.5\%$) and relaying this via digital wireless link to a LCD. The LCD will display basic level and temperature information , A internal memory flash could record the data when the urgent power off. And a text will send to the bind mobile phone.



MasTec Limited

Unit 1 --- 7 Torrens Rd, East Tamaki
Auckland 2013 New Zealand
Tel : 64 9 273 4200
Fax: 64 9 273 9500
Mail : info@mastecnz.co.nz
Web <http://www.mastec.co.nz>

GPRS Wireless Level Monitoring System

Technical Parameters

Main Technical	Parameter	Value	Note
Pressure & Temperature	Pressure Measurement Range	0~500mH ₂ O	
	Overload Pressure	1.5×RP(rated pressure)	
	Broken Pressure	3.0×RP(rated pressure)	
	Accuracy	±0.5%F.S for pressure; ±1%F.S for Temperature	
	Operate Temperature	-20~70℃	
	Storage Temperature	-25~85℃	
	Media Compatibility	Corrosive medium compatible with Cr18Ni9Ti	
	Output Signal	RS485	
	Power Supply	3.6Vdc lipo battery or 10VDC~35Vdc external power	
	Insulation	>100M Ω@50V	
	Electrical connector	Flying lead,IP68	
	Pressure Port	NPT1 etc.	
	Response Time	10ms	
	Pressure Form	Gauge G,Seal S,	
EMC	EMI:EN50081-1/-2: EMS: EN50082-2		
GPRS Level Terminal Unit	Working Frequency	800/850/1800/1900MHz	
	Type of Transmission	TCP/UDP transparent transmission	
	Access Server	IP Address or DNS Name Server	
	Sampling Time	1~9999S (Adjustable)	
	Battery life cycle	100 days with GPS for default time: 1hr 300 days without GPS for default time: 1hr	
	Type of Displayed	LCD Displayed	
	Output	RS232	
	Class of Protection	IP65	

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Unit 1 --- 7 Torrens Rd, East Tamaki
Auckland 2013 New Zealand
Tel : 64 9 273 4200
Fax: 64 9 273 9500
Mail : info@mastecnz.co.nz
Web <http://www.mastec.co.nz>

ARM TYPE SWING GATE OPENER

Features

1. Manufacturer has patent for manual release mechanism. Use this feature in case of power failure, during installation or maintenance.
2. Easy Self-learning feature.
3. Commercial power & solar energy power source can be connected at the same time.
4. Over current immediate stop function
5. Adjustable time of fast speed & slow speed
6. Adjustment of force during fast speed & slow speed
7. Auto Close function with adjustable closing time delay
8. Optional electric lock connection facility
9. Single or dual swing
10. Use max up to 50sets of remote controllers
11. DC 24V backup battery (Optional)
12. Flashing light AC 220V 110V & DC 24V (Optional)
13. Optional Device: DC24V gate lock, photocell, keypad, push button.



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Unit 1 --- 7 Torrens Rd, East Tamaki
Auckland 2013 New Zealand

Tel : 64 9 273 4200

Fax: 64 9 273 9500

Mail : info@mastecnz.co.nz

Web <http://www.mastec.co.nz>

Arm Type Swing Gate Opener DT



SPECIFICATIONS

Electrical		
Power Supply	AC 110V~240V	
Operating Voltage	DC 24V	
Electronic Controller	Microcontroller Based	
Safety Detection	Over Current Detection	
Safety Barrier	Infrared Beam Sensor (Optional)	
IP Rating	IP66	
Mechanical		
Swing Type	DT 3 Plus	DT 3
Max. Piston Stroke	430mm	330 mm
Max. Length of motor	1240mm	1036 mm
Max. Leaf's Weight	450 kg/ Leaf	400 kg/ Leaf
Suitable Leaf's Length	4 meter/ Leaf	3 meter/ Leaf
Frame Housing	Stainless Steel / Aluminum Alloy	
Driving Method	Screw Driven Piston Type	
Opening Degree	0 to 110 degree	
90 Degree Rotation Time	8 to 12 seconds	
Temperature	-25°C to +55°C	

Arm Type Swing Gate Opener EM



SPECIFICATIONS

Electrical			
Operating Voltage	DC 24V		
Electronic Controller	Microcontroller Based		
Safety Detection	Over Current Detection		
Safety Barrier	Infrared Beam Sensor (Optional)		
IP Rating	IP66		
Mechanical			
Swing Type	EM3 Plus	EM 3	EM2
Max. Piston Stroke	450 mm	350 mm	200 mm
Max. Length of motor	1255 mm	1030 mm	730 mm
Max. Leaf's Weight	250 kg/ Leaf	300 kg/ Leaf	300 kg/ Leaf
Suitable Leaf's Length	2 to 3.5 meter/ Leaf	1.5 to 2.5 meter/ Leaf	1 to 1.6 meter/ Leaf
Frame Housing	Stainless Steel / Aluminum Alloy		
Driving Method	Screw Driven Piston Type		
Opening Degree	0 to 110 degree		
90 Degree Rotation Time	8 to 12 seconds		
Temperature	-25°C to +55°C		

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Tel : 64 9 273 4200

Fax: 64 9 273 9500

Mail : info@mastecnz.co.nz

Web <http://www.mastec.co.nz>

Arm Type Swing Gate Opener

Standard Components for Electric Supply



Swing Motors*2
Control Box*1
Remote Controllers*2
Installation manual*1
A few hardware parts

Standard Components for Solar Power



Swing Gate motors*2
Solar control box*1
20W solar panel with bracket*1
12V Backup batteries*2
Remote controllers*2
Installation manual*1
A few hardware parts

Optional Accessories



SLIDING GATE OPENER

Features

1. The design of integrated mechanic and electric structure, streamline fashionable outline
2. Pedestrian open and full open adjustable;
3. With interface of flashing lamp(AC/DC)for pre-warning;
4. Closing gate delay time adjustable;
5. Backup battery is available,battery status display
6. Full speed or tri speed operation selection
7. Self calculating rotational circle system
8. Electronic soft start and stop
9. Line switch/magnetic control
10. Magnetic door alarm(when gates inclosed position)
11. Photocell optional
12. Automtic stop for resistance during opening gate
13. Automatic return for resistance during closing gate
14. Solar compatible



SPECIFICATIONS

Electrical	
Power supply	AC110V to 240V ± 10%, 50 HZ
Operating Voltage	DC 24V
Electronic Controller	Microcontroller Based
Safety Detection	Over Current Detection
Safety Barrier	Infrared Beam Sensor (optional)
IP Rating	IP57
Mechanical	
Model	SD
Max. Gate Weight	800 kg
Motor speed	1800 rpm
Gate moving speed	13m/min
Gate Limit type	Intelligent Position Detection/ Magnetic Limit Switch (optional)
Operating distance	≥50m Frequency:433.92 MHz
Remote control mode	Close/ Open/ Stop/ Pedestrian Open
Auto close time	0~99 sec (Adjustable)
Noise	≤65dB
Product actual size	29*22*23cm



Sliding Gate Opener

Standard Components for Electric Supply

Motor with control unit inside *1
 Remote controles *2
 keys*2
 Alley key*1
 1 set of limit switch
 A few bracket hardware
 Installation manual



Standard Components for Solar Power



Motor with control unit inside *1
 Remote controles *2
 keys*2
 Alley key*1
 1 set of limit switch
 A few bracket hardware
 Solar Panel
 Installation manual

Optional Accessories

				
Solar Panel	Backup Battery	AC Flashing Light	DC Flashing Light	Limit switch
				
Keypad system	Photocell	Push button	Mounting Base	Remote Control
				
Chain	Nylon Rack	Steel Rack	Waterproof Keypad System	

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Unit 1 --- 7 Torrens Rd, East Tamaki
 Auckland 2013 New Zealand
 Tel : 64 9 273 4200
 Fax: 64 9 273 9500
 Mail : info@mastecnz.co.nz
 Web <http://www.mastec.co.nz>

AUTOMATIC SLIDING DOOR SYSTEM

Features

1. DC24V Brushless Motor - Silent operation
2. Microprocessor controller, Easy settings and adjustments
3. Safety stop when meet obstacles during opening
4. Auto reverse when meet obstacles during closing
5. Adjustable Opening / Closing speed and distance
6. Adjustable Auto close delay time
7. During power failure, doors can be opened manually
8. High-strength aluminum alloy rail track
9. During power failure, the backup batteries can be option for continuous operation.
10. Functional Switch Function: Auto, Open, One Way, Lock, Half Open
11. Optional 2 button remote control: Open/ Close & Lock



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Tel : 64 9 273 4200

Fax: 64 9 273 9500

Mail : info@mastecnz.co.nz

Web <http://www.mastec.co.nz>

Automatic Sliding Door System



SPECIFICATIONS

Electrical		
Input Voltage	AC110V~AC240V	
Operating Voltage	DC 24V	
Electronic Controller	Microprocessor Controller/ Dimension: 400*55*50 mm	
Motor	DC24V 70W Brushless Motor/ Dimension: 280*100*90 mm	
Safety Detection	Automatic stop/ reverse during opening or closing	
Optional Devices	Microwave Sensor/ Keypad Systems/ Key Switch/ Remote Control/ batteries/ Magnetic Lock etc.	
Mechanical		
Model Number	A3-S/ Single leaf	A3-D/ Double leaves
Door Weight	280kg/ Single leaf	300kg/ 2 leaves
Door Width	700~1700mm	650~1600mm
Maximum Noise	Below 55dB	
Railing Type	High Strength Aluminum Alloy Rail	
Fixed Pulley	Hanging Wheel Sets/ Convenient Level Adjustment/ Automatic Alignment/ Easy Installation	

One set of Single Kit include



Computerized controller *1
 Motor *1
 Positioning block *2
 Rear wheel bracket *1
 Belt Connection Device *1
 Aluminum Case(2.1 M/each) *1
 Hanging Wheel Set *2
 4.5 Meter Tooth Belt *1
 Glass Holder *2
 Microwave sensors *2

One set of Double Kit include



Computerized controller *1
 Motor *1
 Positioning block *2
 Rear wheel bracket *1
 Belt Connection Device *1
 Aluminum Case(2.1 M/each) *2
 Hanging Wheel Set *4
 7.5 Meter Tooth Belt *1
 Glass Holder *4
 Microwave sensors *2

Optional Accessories



Magnetic Lock



Backup Battery



Functional Switch



Microwave sensors



Sensor Beam



Keypad system



Wireless Touch Switch



Push button



Waterproof Keypad System



Remote Control

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Unit 1 --- 7 Torrens Rd, East Tamaki
 Auckland 2013 New Zealand

Tel : 64 9 273 4200

Fax: 64 9 273 9500

Mail : info@mastecnz.co.nz

Web <http://www.mastec.co.nz>

UNDERGROUND SWING GATE OPENER

Features

1. Adjustable time of fast speed & slow speed
2. Adjustment of force during fast speed & slow speed
3. Auto Close function
4. Adjustable closing time delay for motor with electric lock
5. Single & dual swing is optional
6. Max can up to 50 sets of remote controllers
7. DC 24V backup battery (Optional)
8. Flashing light AC 220V / 110V & DC 24V(Optional)
9. Optional Device: DC 24V gate lock, photocell, keypad, push button, extensional receiver box



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Unit 1 --- 7 Torrens Rd, East Tamaki
Auckland 2013 New Zealand
Tel : 64 9 273 4200
Fax: 64 9 273 9500
Mail : info@mastecnz.co.nz
Web <http://www.mastec.co.nz>

Underground Swing Gate Opener



SPECIFICATIONS

Electrical	
Main Supply Voltage	220V /110V AC
Operating Voltage	DC 24V
Electronic Controller	Microcontroller Based
Safety Detection	Over Current Detection
Safety Barrier	Infrared Beam Sensor (Optional)
IP Rating	IP67
Mechanical	
Model	UA
Max. Leaf's Weight	350 kg/ Leaf
Max. Leaf's Length	3 meter/ Leaf
Frame Housing	Aluminum Alloy
Opening Degree	0 to 180 degree
90 Degree Rotation Time	10 seconds
Temperature	-25°C--- +50°C

Standard Components for Electric Supply



Motors*2
Control Box*1
Remote Controller*2
Electric Lock*1
Installation manual*1

Optional Accessories



Solar Panel



Backup Battery



AC Flashing Light



DC Flashing Light



Electric Lock



Keypad system



Photocell



Push button



Waterproof Keypad System



Remote Control

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Fax: 64 9 273 9500

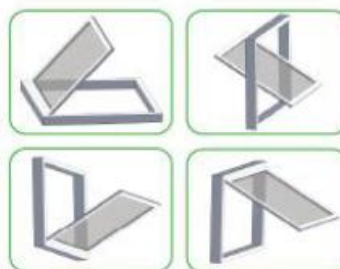
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AUTOMATIC WINDOW/ MOTORIZED AWNING ACTUATOR

Features

1. High torque, DC24V low voltage motor for maximum safety.
2. Aluminum frame housing, fully built-in compact design, self-learning function.
3. Soft start and soft stop function.
4. Automatic stop when hitting obstacles during opening or closing.
5. Built-in hall sensor for accurate opening and closing range with self learning function.
6. Programme setting by remote control.
7. Power: Electric supply or solar system can be selected.
8. Optional parts: Wind/ Light/ Rain Detector, Smoke Detector, Temperature Detector, Push Button.
9. Suitable for: Awning, Skylight, Top-hung Window, Curtain Wall, Casement Window, Roller Blind.
10. Patented design, CE approved product.



SPECIFICATIONS

Electrical	
Power Supply	AC 110V/ 240V
Operating Voltage	DC 24V
Operating Current	3A
Safety Detection	Over Current Detection
Optional Accessories	Smoke Detector, Temperature Detector and Wind/ Light/ Rain Detector
Control System	Electric power or solar control system
Control Panel	Built in controller/ solar power control system (optional)
Remote Control Button	close/ open/ stop/ function
Mechanical	
Model	RA
Suitable Awnings Width	1 to 6 meter X3 meter
Torque	25 N.M
Housing	Aluminium Housing
Driving Method	Worm Gear
Awnings Moving Speed	Open speed 1.5~ 2 minutes, close speed 2~ 2.5 minutes
Noise	Below 50DB
Operating Temperature	- 25°C ~ + 50 °C
Motor Size	265*82*55 mm
Carton Size	325*150*90 mm

Optional Accessories



Solar Panel

Backup Battery

Smoke Detector

Wind/ Light/ Rain Detector

Remote Control

Push button

MasTec Limited

Unit 1 --- 7 Torrens Rd, East Tamaki
Auckland 2013 New Zealand

Tel : 64 9 273 4200

Fax: 64 9 273 9500

Mail : info@mastecnz.co.nz

Web <http://www.mastec.co.nz>

Automatic Window/ Motorized Awning Actuator

Standard Components for Electric Supply



Motor*1
Remote controllers*2
Power adapter*1
Installation manual*1
A few hardware parts(for Awnings Opener) /
A set of Windows Opener bracket

Standard Components for Solar Power



Motor*1
Remote controllers *2
Power adapter *1
Control box *1
Solar panels *1
Installation manual *1
A few hardware parts(for Awnings Opener) /
A set of Windows Opener bracket

Hardware parts for Awnings Opener



Windows Opener bracket



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Automatic Window/ Motorized Awning Actuator



SPECIFICATIONS

Electrical	
Power Supply	AC 110V/ 240V
Operating Voltage	DC 24V
Operating Current	8A
Safety Detection	Over Current Detection
Optional Accessories	Smoke Detector, Temperature Detector and Wind/ Light/ Rain Detector
Control System	Electric power or solar control system
Control Panel	Built in controller/ solar power control system (optional)
Remote Control Button	close/ open/ stop/ function
Mechanical	
Model	DA
Suitable Awnings Width	6 to 8 meter X 3 meter
Torque	70 N.M
Housing	Aluminium Housing
Driving Method	Worm Gear
Awnings Moving Speed	Open speed 1.5- 2 minutes, close speed 2- 2.5 minutes
Noise	Below 50DB
Operating Temperature	- 25°C ~ + 50°C
Motor Size	275*110*45mm
Carton Size	325*150*90 mm

Optional Accessories



Solar Panel

Backup Battery

Smoke Detector

Wind/ Light/ Rain Detector

Remote Control

Push button

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Automatic Window/ Motorized Awning Actuator

Standard Components for Electric Supply



Motor*1
Remote controllers*2
Power adapter*1
Installation manual*1
A few hardware parts(for Awnings Opener) /
A set of Windows Opener bracket

Standard Components for Solar Power



Motor*1
Remote controllers*2
Power adapter*1
Control box*1
Solar panels*1
Installation manual*1
A few hardware parts(for Awnings Opener) /
A set of Windows Opener bracket

Hardware parts for Awnings Opener



Windows Opener bracket



AUTOMATIC WINDOW ACTUATOR SYSTEM



Features

1. DC24V Motor
2. Piston stroke can be manually adjusted
3. Build-in over current safety cut-off feature
4. Suitable for all dimensions of vent window and roof light
5. Build-in control panel, easy installation
6. Can be controlled by wall switch or remote control, control group by one remote control.
7. Various piston stroke to be selected
8. Complete supporting bracket kit, suitable for all window type
9. Operating temperature: -25°C to +50°C



Automatic Window Actuator System

SPECIFICATIONS

Electrical		
Supply Voltage	AC110V~230V	
Operating Voltage	DC 24V	
Safety Detection	Over Current Detection	
Optional Device	Heat Detector/ Smoke Detector	
Controller	Build-in Controller	
IP Rating	IP66	
Mechanical		
Model	TC3	TC2
Max. Piston Stroke	300 mm	200 mm
Max. Length of motor	900 mm	720 mm
Max. Force	1000 N	800 N
Frame Housing	Stainless Steel / Aluminum Alloy	
Driving Method	Screw Driven Piston Type	
Opening Degree	0 to 65 Degree	
Stroke Speed	30mm/s	
Temperature	-25℃ to +50℃	

Standard Components for Electric Supply



Motor*1
 Remote controllers*2
 Power adapter*1
 A set of bracket
 Installation manual*1

Optional Accessories



Solar Panel

Backup Battery

Smoke Detector

Wind/ Light/ Rain
 Detector

Remote Control

Push button

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