

ALPHA 600 SERIES

Industrial Radio Remote Control Systems



Jib Cranes



(Single Girder) Overhead Cranes



(Double Girder) Overhead Cranes



(Double Girder) Gantry Cranes

Low Cost
Reliable & Safety
Durable & Rugged
Ultra Power Saving
100% Water-resistant
Compact & Lightweight



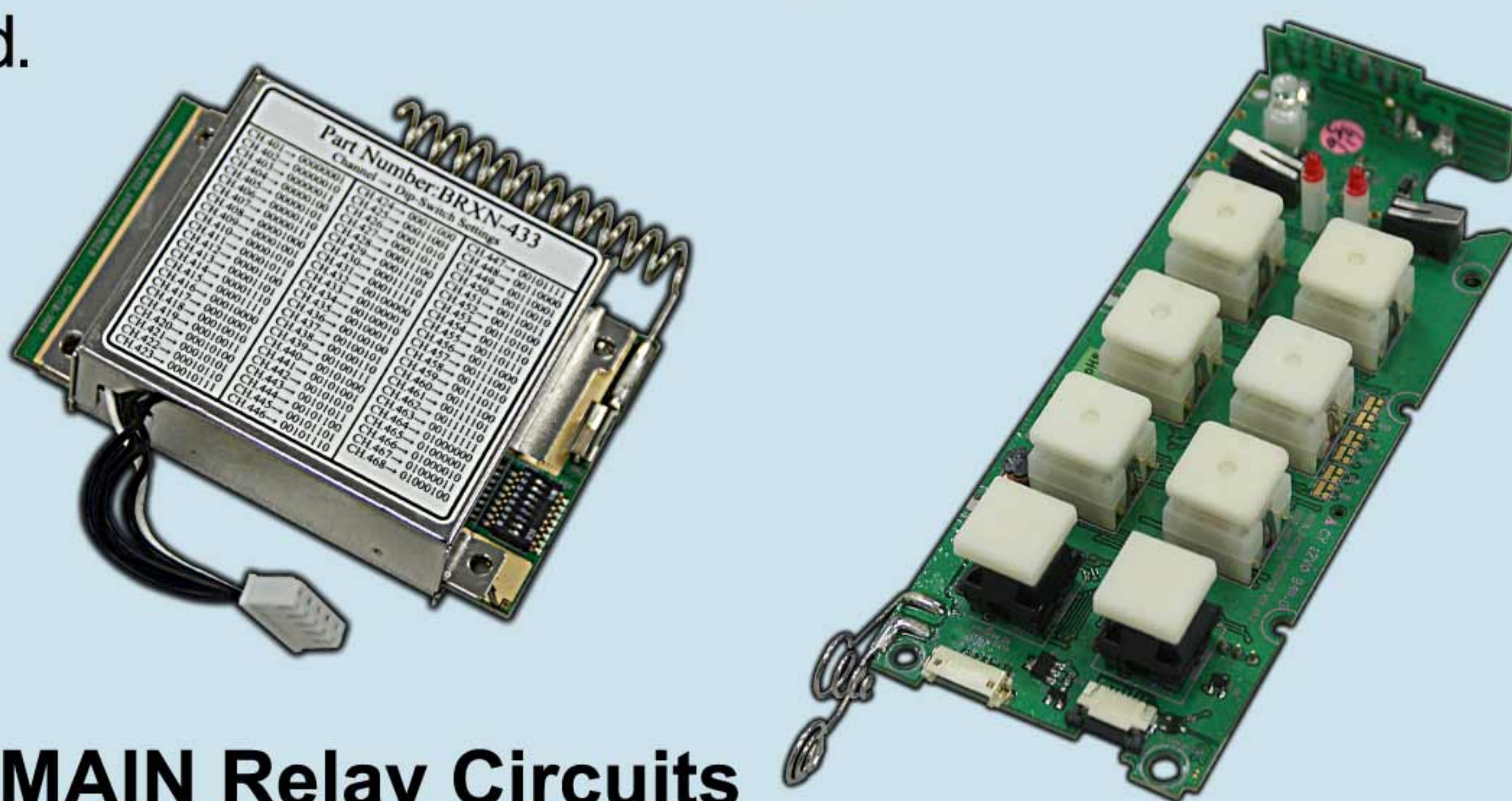
Alpha 600 Designed

Advanced System Software

The Alpha 600 series utilizes advanced microprocessor control with highly evolved system software that has redundant error checking and correcting capabilities to ensure 100% error-free encoding, transmitting, receiving, decoding and controlling of all output relays. This highly evolved system software includes CRC (Cyclical Redundancy Check) and Hamming Codes (Error Recovery).

Safe and Reliable Operation

To ensure maximum operating safety the system incorporates numerous important safety features, which include transmitters pushbutton fault-detection ►► visual warning ►► auto-shutoff, transmitter low-voltage detection ►► visual warning ►► auto-shutoff, receiver fault-detection ►► auto-shutoff, and receiver MAIN relay auto-disconnect when the system is in sleep mode or when transmitter low-voltage condition is detected.



Adjustable PLLRF Module

Both transmitter and receiver are equipped with PLL (Phase Lock Loop) synthesized RF module with 68 sets of user-selectable RF channels (narrow band FM) for the transmitter code transmission.

Safety MAIN Relay Circuits

For added safety the receiver system utilizes a special "Safety Relay" for the receiver MAIN relay circuits. If the receiver MAIN relay is defective (example: fails to open or close) during operation or not responding to a "Stop command) a fault will be detected and the system will be shut down immediately to avoid possibility of any accidents occurring.

Visualized Software

This series allows you to set every kind of function combination on software setting display by connecting programmers and radio remote controls via USB interface.



Complete Auto-Test System

Multi auto-test functions are available, including: receiver and transmitter low voltage test, warning, auto shutdown, pushbutton breakdown test, main relay breakdown tes.....etc.

Industry's Best 2-speed Pushbutton

Custom in-house designed 2-speed pushbuttons are extremely durable and reliable for a minimum of one million press cycles. Unlike most 2-speed pushbuttons available from other radio control manufacturers, these pushbuttons are easily manipulated even when operator is wearing gloves. The snap-action steps provided positive tactile feedback to the operator.



Alpha 600 Series with Safety in Mind

Super Power Saving

Receivers MAIN relay is programmed to drop (open) the "Main Line Disconnect Contact" after several minutes of inactivity. The auto shutdown time can be selected on software setting display. The intermittent data transmitting is designed for power saving purpose, so the fully charged batteries can be used for over consecutive 120 hours

Electromagnetic Induction Charge

The undisclosed metal and sensor type contact of battery charger provides immediate charging simply by placing the transmitter into the charging slot. Opening the battery cover to change the batteries is not needed. With this design, the transmitter waterproof function and structure strength are increased. The transmitter operating life is also prolonged. Available charging source voltage : 100~240VAC.



Shock Absorbing Rubbers are available for transmitters

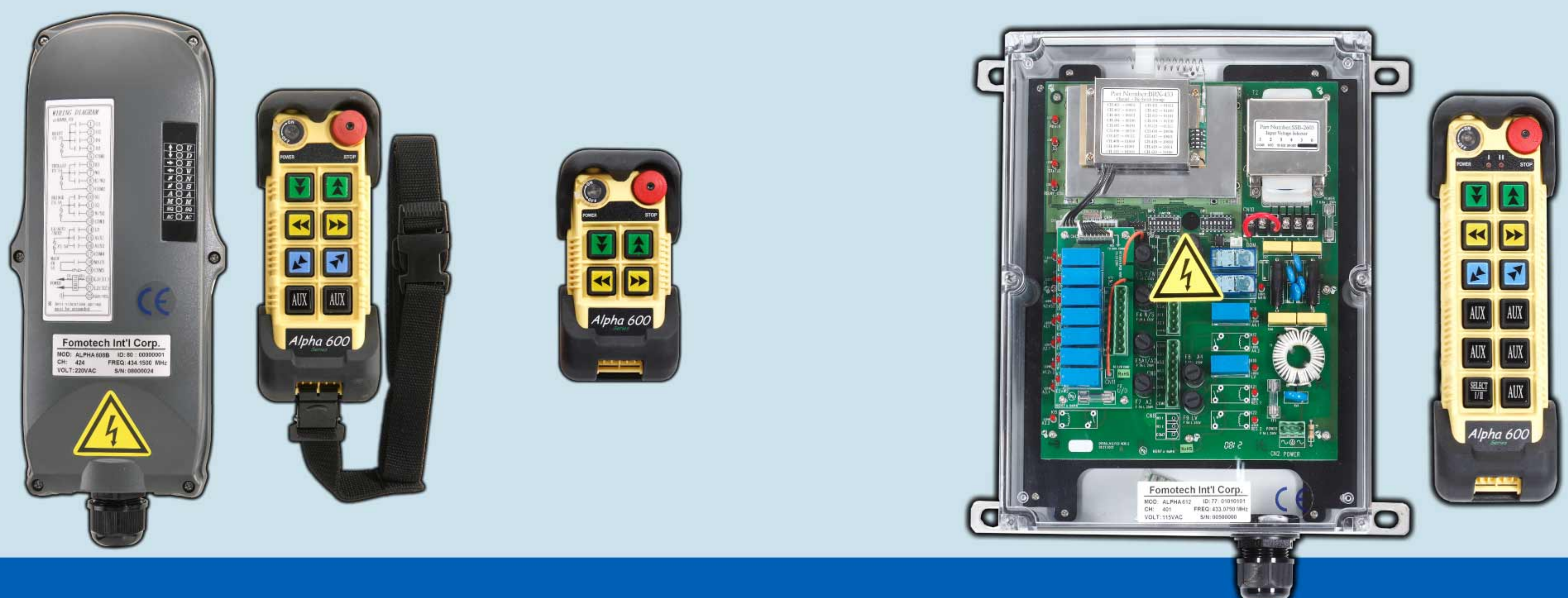
The shock absorbing rubbers on the transmitter top and bottom strengthen the shock absorbing ability and frequent dropping.

Waterproof and Durable

The transmitter and receiver enclosures are constructed from high-grade composite materials that resist cracking and deformation commonly occurred from frequent drops and long-term exposure to heat, sunlight and harsh environments. The enclosures are fully sealed and impervious to dust and water, oil, acids alkaline, heat and sunlight, which provide trouble-free operation in high moisture environments and outdoor applications.

Full Compliance

The Alpha 600 series are designed and manufactured in accordance with FCC Part 15 Rules, European Directives (CE/CB), Industry Canada Specifications (IC) and ISO 9001 guidelines. No site license is required.



ALPHA 600 SERIES

Web Site : www.titancrane.co.th

E-mail : info@titancrane.co.th titancranemail@yahoo.com

15 MODELS

α 604A	(4) single speed pushbuttons
α 604B	(4) double speed pushbuttons
α 607A	(7) single speed pushbuttons
α 607B	(6)double speed pushbuttons+(1)single speed pushbutton
α 607AT	(6)single speed pushbuttons+(1)SELECT I/II pushbutton*
α 607BT	(6)double speed pushbuttons+(1)SELECT I/II pushbutton*
α 608A	(8) single speed pushbuttons
α 608B	(6)double speed pushbuttons+(2) single speed pushbuttons
α 612A	(12)single speed pushbuttons
α 612B	(11)single speed pushbuttons+(1) SELECT I/II pushbuttons*
α 612C-1	(6)double speed pushbuttons+(6) single speed pushbuttons
α 612C-2	(8)double speed pushbuttons+(4) single speed pushbuttons
α 612D	(10)double speed pushbuttons+(2) single speed pushbuttons
α 612E-1	(6)double speed pushbuttons+(5)single speed pushbuttons+(1)SELECT I/II pushbutton*
α 612E-2	(8)double speed pushbuttons+(3)single speed pushbuttons+(1)SELECT I/II pushbutton*

* For crane systems with auxiliany hoist and tralley changeover function (5~6 motions)



SPECIFICATIONS

Transmitter Unit

Frequency Range	: 433, 447, 480 MHz
Transmitting Range	: 100 meters
Hamming Distance	: 6
Channel Spacing	: 25KHz
Frequency Drift	: < 5ppm @ -25°C~+75°C
Frequency Deviation	: < 1ppm @ -25°C
Spurious Emission	: - 50dB
Transmitting Power	: 0.1Mw-10mW
Emission	: F1D
Antenna Impedance	: 50 ohms
Enclosure Rating	: IP-66
Source Voltage	: Ni-MH AA size battery 2.4V
Current Drain	: 10~18mA
Operating Temperature	: -10°C~+50°C
Transmitting power consumption	: <30mA@3.5V (various from encoding mode and transmitting power)
Operating time	: consecutive 120hrs @batteries full (2500mA), Band 433MHz, transmitting power 1mW)
Dimension (604 Models)	: 140mm x 68mm x 30mm
(607~608 Models)	: 189mm x 68mm x 30mm
(612 Models)	: 235mm x 68mm x 30mm
Weight (604 Models)	: 240g (include batteries)
(607~608 Models)	: 300g (include batteries)
(612 Models)	: 350g (include batteries)

Charger Unit

Dimension	: 120mm x 105mm x 105mm
Voltage	: 100-240V 50/60Hz
Power Consumption	: max 7 Watt
Operating Temperature	: 0°C~+40°C
Heat Ventilation	: temperature control fan
Charging Current	: about 600mA @3V
Charging Time	: about 5hrs @2500mA
Charging Detection	: -ΔV + temperature

Receiver Unit

Frequency Range	: 433, 447, 480 MHz
Channel Spacing	: 25KHz
Hamming Distance	: 6
Frequency Control	: Synthesizer (PLL)
Frequency Drift	: < 5ppm @ -20°C~+70°C
Frequency Deviation	: < 1ppm @ 25°C
Sensitivity	: <-115dBm
Antenna Impedance	: 50ohms
Data Decode Reference	: Quartz Crystals
Responding Time	: 40ms (Normal)
Enclosure Rating	: IP-66
Source Voltage	: α604/7/8 DC12-24V° AC48, 110~240V 50/60Hz α612 AC25-50V, 110~240V, 380-460V 50/60Hz
Power Consumption	: 11VA
Operating Temperature	: -10°C~+70°C
Output Contact Racting	: 250V @ 10A
Dimension (604 Models)	: 310mm x 134mm x 72mm
(607~608 Models)	: 310mm x 134mm x 72mm
(612 Models)	: 300mmx 230mm x 86mm
Weight (604 Models)	: 1,625g (include output cable)
(607~608 Models)	: 2,000g (include output cable)
(612 Models)	: 3,400g (include output cable)

TITAN[®]

TITAN CRANE CO.,LTD.

บริษัท ไทแทน เครน จำกัด

1/19 Moo 1 Pimpa, Bangpakong Chachoengsao 24180 (Thailand)

Tel. 0-3857-1666 to 9 Fax. 0-3857-1665

E-mail : info@titancrane.co.th titancranemail@yahoo.com

Web site : www.titancrane.co.th