

NOVA TRANSMITTER SPECIFICATIONS

Operating Frequency	433.92MHz
Frequency Stability	0.037ppm/ $^{\circ}$ C ² and 10ppm/year
Max. Effective radiated power	151.2nW
Antenna	Etched onto PCB
Modulation method	OOK
Data rate	1000 Baud
Power source	GP23 12V Alkaline Battery
Operating Voltage	12V DC
Min. Operate Voltage	5V DC
Operating Current	7mA
Transmit indicator	Green LED
Operating Temperature Range	-15 $^{\circ}$ C to 50 $^{\circ}$ C
Case material	ABS
Clip material	Acetal
Lens material	Polycarbonate
Button material	TPE
Dimensions (LxBxH)	59mm x 35mm x 16mm
Mass with battery	38 grams

NOVA TRANSMITTER OPERATIONAL DESCRIPTION

The NOVA transmitter is used in conjunction with the NOVA receiver to achieve remote control of garage doors, gates etc. over distances of up to 100m. The transmitter is available with one, two, three or four buttons, allowing control of up to four functions.

The transmitter operates at 433.92 MHz. The oscillator is SAWR stabilized, ensuring good stability over temperature and time. Power is derived from a 12V alkaline battery (GP23 or similar). ON-OFF Keying (OOK) is used as the modulation method. A KEELQ™ encoder ASIC is used to modulate the oscillator, generating the encrypted transmission of both a 28-bit serial number as well as other protocol data. The serial number is programmed into the ASIC at the time of manufacture, and cannot be changed. The transmission is repeated for up to 20 seconds while the pushbutton remains pressed. Thereafter, transmission will cease. Data is transmitted at a rate of approximately 1000-baud. A green LED is illuminated by the ASIC whenever transmission is taking place.

The case is held together with an external clip, which need only be removed if the battery is to be replaced.