

# M211

## High Capacity Modular Time & Frequency System

The M211 High Capacity Modular Time & Frequency System is a highly flexible timing system designed for use in any applications where reliable time information is required, especially to synchronise different output interfaces.



M210 Modular Time & Frequency system also available, which is only 1U high and has 3 module slots



### Features

- 9-slot module output capacity
- Choice of clock synchronisation options
- Choice of master clock accuracy
- Large range of output options
- 3 U high standard 19" rack mount
- 5-segment front panel button for equipment configuration and control
- Large alphanumeric display of time, date and status
- Equipment configuration stored in non-volatile memory

The M211 High Capacity Modular Time & Frequency System allows the inclusion of a large number of options such as data interfaces and standard time receiver modules.

These options allow the output of time and date in various formats together with the automatic synchronisation of the Master Clock to the various national and international time standards that are available. The inclusion of a precision oscillator ensures long-term high stability.

The M211 High Capacity Modular Time & Frequency System is designed to support applications requiring a large number of varied interfaces, or the inclusion of high precision oscillators. The provision of 9 module slots gives great scope to the functionality of the M211, whilst it still remains compact within a 3U 19" rack mountable unit. This ensures that the M211 can fulfil complex system requirements, which are beyond the capacity of the smaller M210 Modular Time & Frequency System.

### Input Synchronisation Options

- Satellite (GPS)
- Analogue timecode, e.g. IRIG-B, AFNOR NFS-87500
- Terrestrial Low Frequency (MSF, DCF77, WWVB, etc)

### Output Options

- Serial data outputs (RS232, RS422, 20mA Current Loop)
- Parallel BCD output
- Time code outputs (IRIG, etc)
- Analogue clock impulse drives.

### Master Clock (Oscillator) Options

- Standard crystal
- Oven controlled crystal
- Commercial grade Rubidium
- Industrial grade Rubidium
- Industrial grade Caesium
- Military grade Caesium Satellite (GPS, GLONASS or BEIDOU) via NFS-87500



# M211 Specifications

## Performance Specification at 20°C

Time Accuracy:	Standard crystal oscillator maintains free run accuracy of 20 milliseconds over 4 hours at 20°C.
Display:	2 row by 40 character LCD. Character height 5mm.
Keyboard:	5-segment button keypad for equipment configuration and control. Storage of equipment configuration in non-volatile memory.
Power:	90-260V AC $\pm$ 10% 50-60Hz Load 40W (typical)- subject to options and oscillator fitted. Connection via 3 pin IEC plug.
Mechanical:	19 inch rack mounting 3U high 353mm deep. The chassis has provision for up to 9 option modules to be fitted within the unit We have an extensive range of modules - please ask our Sales Team for details

## Environment (Operation and Storage)

Temperature:	0°C to +40°C
Humidity:	Up to 95% RH (non-condensing)
EMC:	EN61000-6-3:2007 + A1:2011 EN61000-6-2:2005 EN50121-4:2016 + A1:2019

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