RADIO TIMING® GTC
RACK 19" 1U

Master clock with built-in programmer unit and impulse output (either 1A/24V parallel minute impulse or half- minute serial reversed pulse).

Automatic and programmable Daylight Saving Time.
Automatic time setting when switched on.

Internal time base

Microprocessor quartz time base, **Radiosynchronisable**: 3.6864 MHz
Accuracy : +/- 0.1 sec/24 hours between 20°C to + 30°C

Security

- In case of power failure, back up of Time keeping and Program for up to 10 years ensured by lithium battery.
- Memorization of impulses and rapid synchronization of slave clocks when power is on.
- **Protection filter against over voltage and industrial interferences.**

Specifications

Power supply available	230 VAC – 50/60Hz type IEC 60320 defined C14 115 VAC – 50/60Hz type IEC 60320 defined C14
Power cable	IEC 60320 defined C13 / MALE SCHUKO 2 (EUROPE) & (Type F)*
Certifications	CE, EN 60950 (safety), EN 55022 (EMC transmission), EN 55024 (EMC immunity)
Maximum Consumption	45 VA
IP	31
MTBF	100 000 h
MTTR	Mother board: 10 min Display board: 5 min Output board: 5 min
Weight	2.6 kg max
Dimension	482x44x266 mm (LxHxD)
Display	LCD graphics 4 lines 20 backlit characters blue
Operating temperature	-10° to 50°C
Storage temperature	-20° to 70°C

For other types of power cables, refer to the power cable reference table

Key features

- Display of date and time on LCD screen.
- Compact Product
- **Easy programming via front panel keyboard.**
- back up of Time keeping and Program for up to 10 years ensured by lithium battery.
- Program retaining ensured by flash memory storage.

Synchronization inputs

- DCF (Europe)
- GPS without external power supply up to 100m on a single pair tel cable (via a GPS/DCF converter)
- AFNOR NFS87500 (IRIG B)
- ASCII RS232
- ASCII RS422/485.

Synchronization outputs

- Default parallel reversed pulsed minute 24V/1A or ½ serial minute. (can drive up to 140 units of GORGY TIMING clocks.)
- AFNOR NFS 87500/IRIG B 1000Hz Time code output. Millisecond accuracy. (can drive up to 250 units of GORGY TIMING clocks.)
- ASCII RS422/485.
- ASCII RS232.

Programmer

Built-in **weekly programmer** can also be used for **annual events schedules** such as: national holidays and school vacations. It operates on *Timing* or *ON/OFF* mode.
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- **Programming by keyboard on front face.**
- **3 independent relays, voltage-free output,** breaking capacity 250 volts 10 A.
- **1 pre-wired 230-volt output relay,** 10A breaking capacity.
- **Option: 2 additional dry-contact relays.**

Ref : BDR_UK1-8_Master-clock-Time-servers-Software-V10.0-priceless
All technical changes, aesthetic, colour can be made without notice.

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	ITEM CODE						
	4550 /						

VERSION ENTREE DE SYNCHRONISATION		↑	↑	↑	↑	↑	↑
Standalone ▣	2						
AFNOR NFS 87500 / IRIG B Receiver ▣	8						
[1]DCF Radiosynchronization (antenna not included) ▣	D						
[1][2]GPS synchronization without time offset (antenna not included) ▣	G						
[1][2]GPS synchronization with time offset (antenna not included) ▣	J						
ASCII RS 232 (GT) synchronization ▣	A						
ASCII RS 485 (GT) Synchronization ▣	R						
ASCII RS 232 (horoquartz HQ) Synchronization ▣	H						
ASCII RS 422/485 (horoquartz HQ) Synchronization ▣	Q						
NTP Ethernet 10/100 base T Synchronization ▣	N						

(1) For the antennas please refer to the antenna table below
(2) offset from france. For the offset, specify the city where the device will be located.
(See table)

POWER SUPPLY							
230 VAC – 50/60Hz ▣		0					
115 VAC – 50/60Hz ▣		1					

PULSE OUTPUTS							
Parallel reversed pulse minute 24V/1A ▣			3				
Or 1/2 minute reversed serial minute 48V output ▣			5				

AFNOR OUTPUT EXTENSIONS							
Without AFNOR NFS 87500 / IRIG B output ▣				0			
With AFNOR NFS 87500 / IRIG B output ▣				8			

ASCII OUTPUT EXTENSIONS							
Without ASCII output ▣					0		
2 ASCII RS 232 (GT) outputs ▣					A		
1 ASCII RS 485 (GT) output ▣					R		
1 ASCII RS 232 (horoquartz HQ) output ▣					H		
1 ASCII RS 422/485 (horoquartz HQ) output ▣					Q		

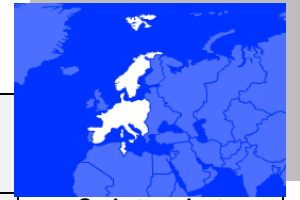| OPTION							
2 additional dry contact relays ▣						R	
Tropicalization ▣						U	

OPTION: CONFIGURATION
Programming of relays and synchronization outputs.

Ability to configure and program the equipment in the factory according to the customer information. In that case, add an extra line in the order.

ANTENNA		ITEM CODE
DCF Antenna with 4m cable ▣		**3D6**
DCF Antenna with 7m cable ▣		**3D7**
GPS Antenna with 10m cable ▣		**3G10-V3**

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Use in local French time (same time zone)
(only for France, Spain, Italy, Germany, Netherlands, Switzerland, Norway, Sweden, Belgium, Luxembourg, Monaco, Austria, Bulgaria, Poland, Czech Republic)

Synchro. source	Description	Time output	Code to select (4580/ ?) (4550/ ?)
GPS	3G antenna in French local time	Output in local French time only	G
AFNOR/IRIG-B (local)	The AFNOR signal must be in local French time	Output in local French time only	8
DCF	Standard	Output in local French time only	D
ASCII local	The ASCII signal must be in French local time. ASCII GT or Horoquartz protocol only	Output in local French time only	A: RS232 R: RS485/RS422
Standalone	Standard	Output in local French time only	2

Use in other countries or in UTC time

Synchro. source	Description	Heure des sorties	Code to select (4580/ ?) (4550/ ?)
GPS local	Factory-configured 3G1 antenna	Outputs in local time only **Specify the country in BE remarks**	J
GPS UTC	Factory-configured 3G1 antenna	Outputs in UTC time only. **Specify "output in UTC" in BE remarks**	J
AFNOR/IRIG-B (local)	The AFNOR signal must be in local time	**Outputs in local time only**	8
AFNOR/IRIG-B (UTC)	The AFNOR signal must be in UTC	**Outputs in UTC only**	8
DCF	**Not available**	**Not available**	Not available
ASCII (local)	The ASCII signal must be in local time. ASCII GT or Horoquartz protocol only.	**Outputs in local time only**	A: RS232 R: RS485/RS422
ASCII (UTC)	The ASCII signal must be in UTC. ASCII GT or Horoquartz protocol only.	**Outputs in UTC only**	A: RS232 R: RS485/RS422
Standalone	**Standard** ⚠ *Avoid using this configuration in countries with a time change policy.*	Outputs in local time only **No DST management (summer/winter time change not managed by the master clock)**	2

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