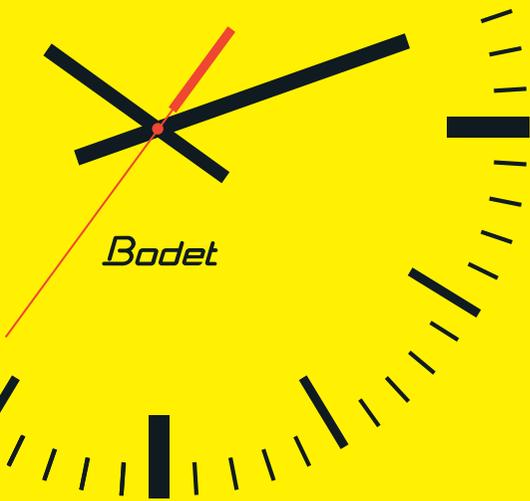




Our solutions for hospitals & clinics

TIME DISPLAY
SYNCHRONISATION / DISTRIBUTION



Synchronise every moment

Bodet is a French family company founded in 1868. It has earned a reputation for its expertise in time management, building on its primary activity of tower clock restoration as Bodet Campanaire. Over the years, the company has expanded its time precision know-how to apply it to sports scoreboards, industrial clocks, sound systems, as well as time and attendance management. Thus, alongside Bodet Campanaire, the entities Bodet Sport, Bodet Time and Bodet Software were founded.

Now managed by the fifth generation of the Bodet family, the company continues to grow both in France and internationally, focusing on innovation to create a range of high-tech products designed and manufactured in France. A number of healthcare facilities throughout the world have come to rely on Bodet Time products to synchronise and display the time.

Bodet Time also provides telephone assistance in many languages. Our technical experts help our clients set up the products and perform functional and technical software updates.

MADE IN FRANCE





Tailor-made support to meet the specific needs of the healthcare sector

In the healthcare sector, time is critical for patients, the medical team, staff and visitors. Indeed, time is everywhere: in hospital rooms, entrance halls, waiting rooms, operating theatres and hallways.

Beyond a simple time display, inaccurate time can lead to disastrous situations. Time must be reliable, accurate and synchronised to all devices connected to the computer network. For this reason, a single time reference must be deployed across all devices on the computer network to achieve synchronisation: clocks, computers, video surveillance systems, medical devices, examination devices, air and water treatment electrical systems. All these devices must show the same time.

Regardless of the size of a facility, accurate, precise and synchronised time ensures that patient care runs smoothly.

As specialist in time synchronisation and distribution, Bodet Time meets the specific needs of healthcare facilities by providing:

TIME SERVERS

The Netsilon range of time servers meets all the requirements of healthcare facilities by synchronising clocks and devices connected to the computer network with the NTP protocol.

CLOCKS

Whether analogue or digital, for an indoor or an outdoor use, and specifically designed to fit in hospital rooms, entrance halls, hallways and operating theatres, Bodet Time clocks deliver identical, accurate and reliable time information to anyone finding itself in a healthcare facility: patients, visitors, medical and administrative staff.

Within a healthcare facility, every second counts

The main mission of a healthcare facility (private or public) is to provide patient care 24 hours a day. This is why every second counts.

When checking vital signs such as heart rate and breathing as well as providing patient care: **time display is essential.** Within the emergency department, the medical staff (doctors and nurses) need reliable time recording to ensure the smooth follow-up of the patients.

When arriving at the emergency department, some patients need urgent care when they are in a life-threatening condition. **Accurate timing help to increase chances of survival and limit the risks of after-effects.** In operating theatres and dialysis rooms, timekeeping allows for optimised management of medical procedures.

Time display is also useful outside clinic care areas, such as in hospital rooms, hallways and entrance halls to provide patients, visitors, and technical staff with time.

Within a hospital, several electrical systems are in use on a daily basis to manage air and water treatment, the operation of general equipment (medical devices, examination devices, lifts, switches, automatons, clocks, time servers) as well as security equipment (video surveillance, access control systems, and so on). This is the reason why **all devices must be synchronised by a time server to provide a secure, accurate and reliable time.**

When connected to the computer network, these clocks integrate **the SNMP protocol** (supervision) which allows **the reporting of anomalies and a reduction in maintenance costs** while ensuring continuous operation.



We were looking for a time synchronisation system for our clocks that was sophisticated enough to implement a time stamping that was as accurate as possible. Our problem was to manage to synchronise 4 completely different, autonomous and hermetic networks.

We already had Bodet clocks at the University Hospital, so it was quite natural for us to reach out to the company to meet our requirements.

We are trusted by



Hôpital Saint-Louis - Paris
France



Royal Clinic - Rabat
Morocco



National University Hospital
Singapore



La Citadelle Hospital - Liège
Belgium



Burjeel Hospital - Abu Dhabi
United Arab Emirates



Pucallpa Hospital
Peru

David MESSINA, Centralised Technical
Management Engineer
Montpellier University Hospital

Our products for hospitals and clinics

When connected to the existing computer network, all our clocks are synchronised with the time information distributed by a Netsilon time server. They guarantee a reliable, precise, secure and identical time display throughout a clinic or an hospital.



Analogue clocks



Profil 900

- 2 diameter options: 30 and 40 cm
- Indoor models
- 3 casing colours: ○ ● ●
- Option: double-sided



Profil 700

- 2 diameter options: 30 and 40 cm
- Indoor models
- Options: lighting, double-sided
- Stainless steel bezel (30 and 40 cm)
- Tempered glass face
- Resistant to cleaning products

Choosing a time distribution



Digital clocks



Style

- 13 indoor models
- Time display: 5, 7, and 10 cm
- Display depending on model: hours, minutes, seconds, date, temperature, timekeeping (counting, countdown)
- LED colours: ○ ● ● ● ●
- Options for operating theatres: recess-mounted models, timekeeping keyboard (counting, countdown)



Opalys and Cristalys

- 8 indoor models
- Time display: 7 or 14 cm
- Display depending on model: hours, date, temperature, week number, text
- Energy saving mode
- Opalys: backlit version



Time servers



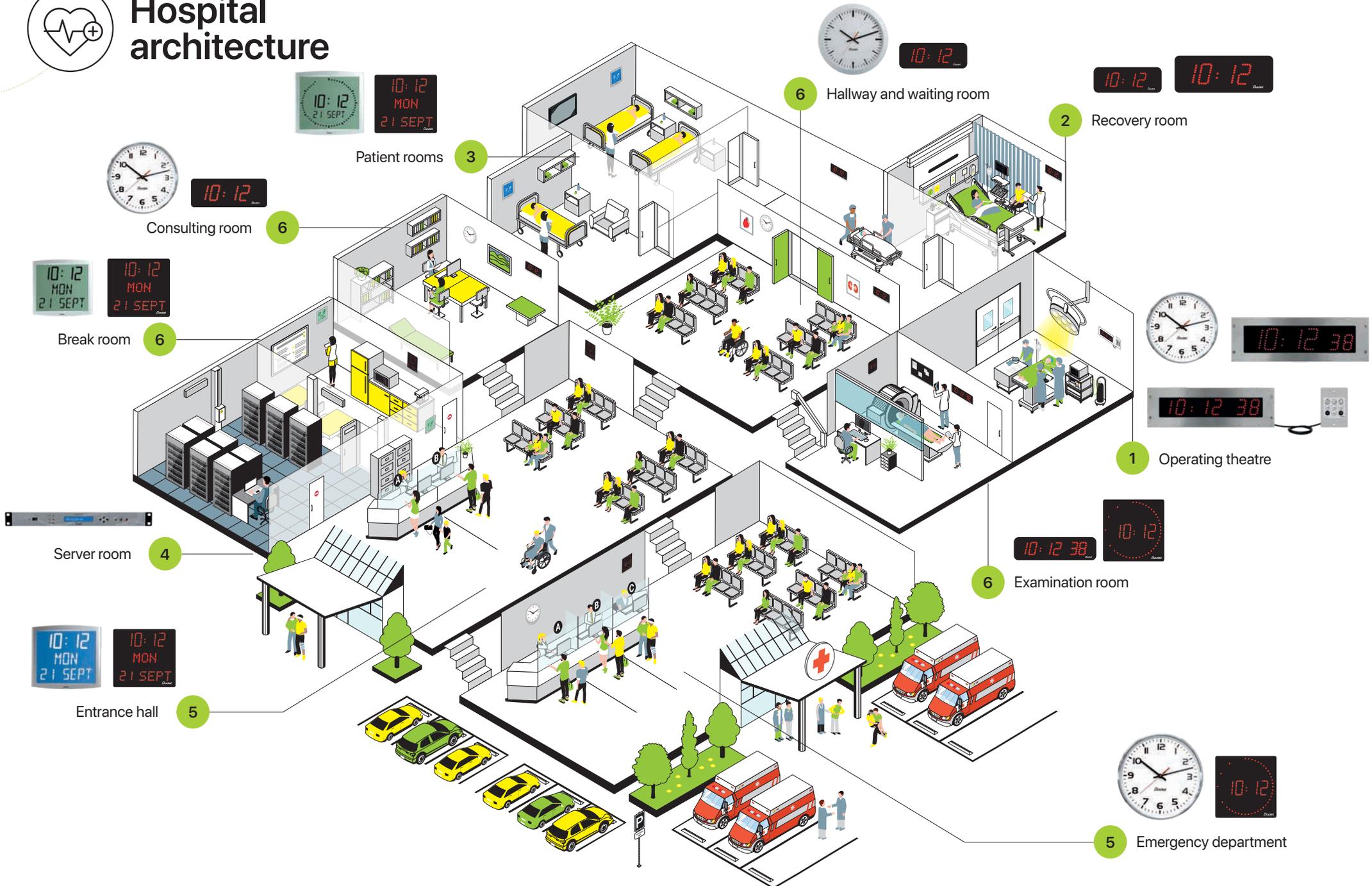
Netsilon

- Satellite synchronisation: GPS, GLONASS, BeiDou, Galileo
- Time base: TCXO, OCXO, OCXO HQ
- Notification and supervision: Email, SNMP
- Input & output protocols: NTP, PTP, IRIG-B
- User-friendly web interface with remote server setup



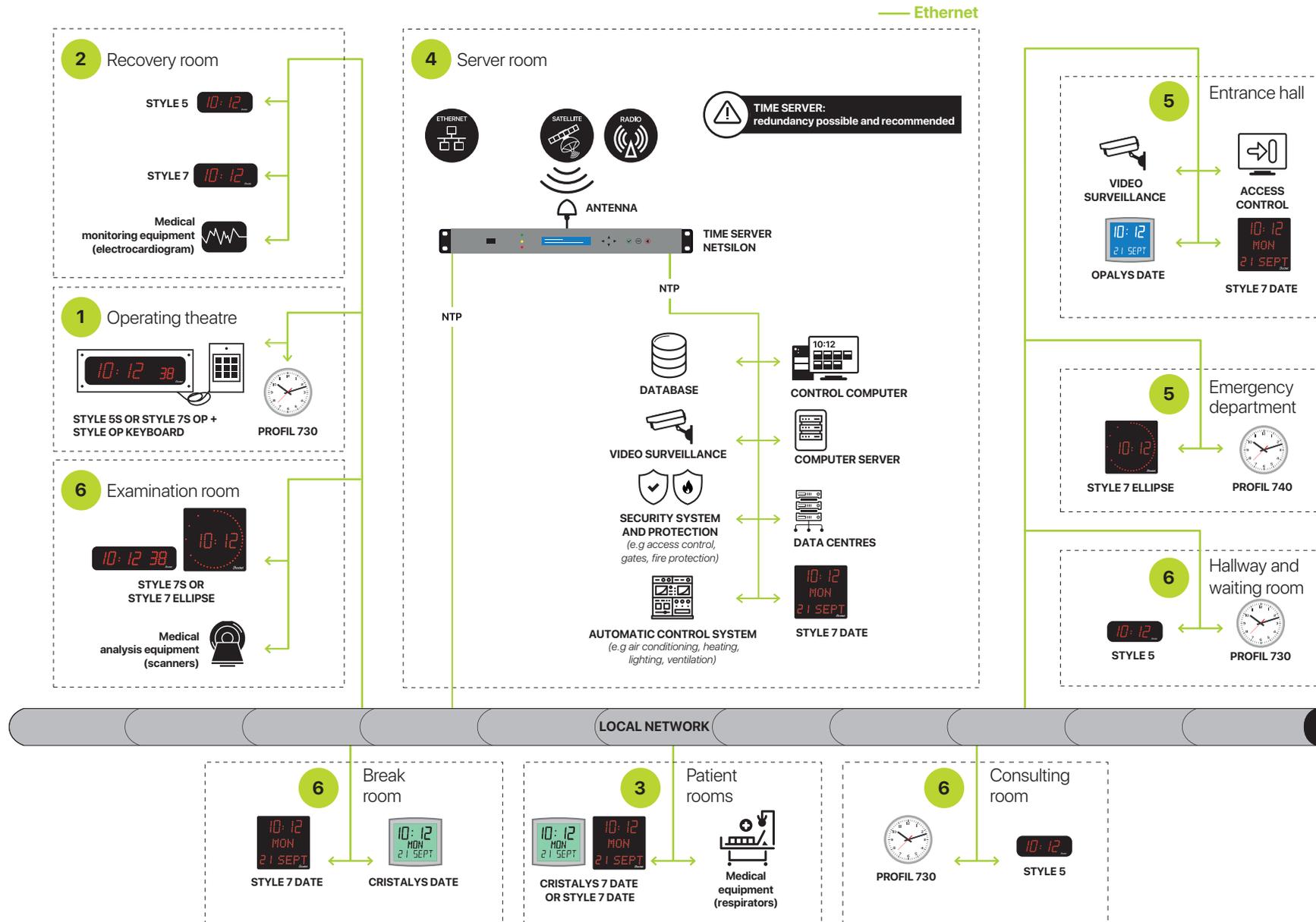


Hospital architecture





Hospital installation example



Time display for patient care

1

Operating theatre: maintaining continuous hygiene

To ensure that surgical procedures run smoothly and to prevent patients from getting any form of infection or contamination, operating theatres are bacteria free sterile areas. To this end, hospitals and clinics are required to apply strict hygiene standards.

To meet this challenge, Style 5S and 7S OP clocks as well as Profil 730 and 740 clocks are made of brushed stainless steel along with a tempered glass face.

This material has been designed to resist to cleaning and disinfectant products as well as to make clock cleaning easier. Style OP clocks can be recess mounted in the control panel to prevent any dust from building up.

Optimised time management

During a surgical procedure or anaesthesia, the counting and countdown of hours, minutes and seconds is essential.

During critical situations, staff in an operating theatre sometimes have to make split second decisions.

Following a cardiac arrest, the length of time resuscitation should be carried out for needs to be strictly measured, making timing a critical part of the life-saving process.

The Style OP keyboard is built in the control panel and provides this timing function. It is very easy to use and allows for the control of Style 5S OP and Style 7S OP clocks.

2

Recovery room: Ensuring the smooth awakening of patients

Following a surgical procedure requiring a general anaesthetic, patients are transferred to a recovery room. When waking up, they often feel disorientated. Style 5 and 7 clocks are perfectly suited for helping patients keep track of time by showing the time and the date.

3

Patient rooms: Time display to prevent losing track of time

During long hospital stays, patients can sometimes lose track of time. When they are forbidden to go outside or they don't have the physical capacity to leave their room, they no longer make the distinction between day and night and then, they can lose track of time. Cristalys Date or Style Date digital and silent running clocks are installed opposite each bed so as to reassure patients by displaying the time, date and day of the year.



Ultra-precise time synchronisation

4

Server room: Optimised and secure synchronisation of IT equipment

Within a hospital and a clinic, many devices are connected to the computer network: medical devices, computers, video surveillance systems, clocks, air and water treatment electrical systems, and so on. In order for them to display identical and accurate time, they must be synchronised using a time server.

The Netsilon time server retrieves a secure reference time from its own antenna (GNSS) and distributes it to devices via an AFNOR, NTP or PTP time distribution, thus limiting the risks of cyberattacks.

Timestamping for efficient network management

Different information systems such as computers, medical and examination devices must be available and functional to keep providing continuous patient care. The timestamping function of Netsilon time servers allows for monitoring the events that occurred on the computer network via logs.

Technical operators can also monitor the condition of the network, identify the origin of one or several incidents, as well as reproduce outage scenarios if need be. This allows for faster fault diagnosis and more efficient maintenance.

In the medical sector, most administrative tasks are computerised and the data digitised. It is then essential to timestamp all events to ensure the smooth running of patients' medical records backup processes.

5

Entrance hall / Emergency department: Providing better care for patients

The entrance hall and emergency department of a hospital or a clinic are crowded areas. When arriving at the emergency department, the patient waits to be taken care of by the admitting staff depending on the time of arrival, their pathology and degree of urgency, as well as their medical condition. Therefore, knowing the arrival time of each patient is essential. To this end, these areas are usually equipped with analogue clocks such as the Profil 740. The diameter of these clocks' dials allows for a great time readability at any distance. Opalys, Style 7 Ellipse and Style 7 Date digital clocks are also excellent alternatives for providing additional information such as the date, the day of the week and the year.

6

Hallway, waiting room, consulting room: Time display for visitors

In order for patients, visitors, doctors and staff from different departments to be provided with the same time reference, synchronised clocks must be located in crowded areas: hallways, waiting rooms, consulting rooms.

By displaying a reliable time, visitors will be able to keep their appointments and the nurses will be able to provide care at the right time. Many analogue or digital clock models are perfectly suited for these areas: the Profil 730, the Profil 930 or the Style 5.



Bodet Time, service included!

As specialist in time management,
Bodet Time also guarantees:

- Pre-sales support
- Tailor-made product offer:
from synchronisation to time display
- Products made in France & CE certified
- FAT and SAT tests on request
- Extended warranty on request
- Tailor-made trainings for customers
- Hotline assistance in France, and internationally

Synchronise every moment

Bodet



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