



CLB C8101-h Local Controller

This state-of-the-art local controller is the heart of CLB's systems. Being characterised by speed and reliability, this controller is particularly suitable for high demanding environments, such as care and cure institutes.

PRODUCT SHEET

C8101 Local Controller

Application and scalability

The controller comes in two shapes / forms: built in a hardware casing (C8101-h) and as a PCB card (C8101-r). The durable and robust design of the casing enables it to be installed locally, for example above suspended ceilings or in fuse boxes. The PCB card type is specifically designed to be installed in 19" racks situated at a central location, for example in technical rooms or cabinets. A typical 19" rack (3 HE) can hold up to 14 C8101-r units.

Two busses with modules can be connected to a single controller covering a distance up to 200 meter (2 x max 100m¹). The controller and modules are designed to deliver reliable quality across these distances. A single controller can hold up to 60 modules (30 per bus). Each bus string can hold up to 15 modules of the same type.

Reliability

CLB's controller and modules are developed and manufactured in compliance with ISO 13485, a strict quality standard for medical devices. When applied to the manufacturing process, ISO 13485 certification helps ensure strict quality assurance criteria on every aspect of production, resulting in a tightly controlled manufacturing system that reduces the likelihood of non-conforming products. This provides consistency in product quality and provides a solid basis for greater reliability in device safety and performance.

System surveillance

The CLB C8101 local controller continuously monitors all modules. When a module is disconnected, disabled or malfunctioning, a warning message is shown to alert an operator or system administrator. The local controller also incorporates a self-monitoring system that can ultimately automatically trigger a controller reboot when an error has caused the local controller to stall.

Use of existing (standardized) infrastructure

Modules are connected via CAT5 cables to the C8101 controller in two bus strings. In many cases, the existing infrastructure of CAT cables can be used to connect the devices and set-up the system.

Ease of installation and management

After a simple basic training course, technicians are capable of installing the hardware and checking connection integrity. Module settings are stored on the controller itself. As a result, replacing any module is child's play: simply replace the module (with the address dial set to the same position) and the settings are automatically updated and the system is restored.

Remote updates

The controller and module firmware can be updated remotely. Besides saving time and reducing maintenance costs, remote updating also increases safety as the system is more likely to have the latest firmware installed.

¹Depending on number of modules. Please refer to the CLB system installation guide for further details.

Improve care by innovation

MODELS



CLB C8101-h Local Controller



CLB C8101-r Local Controller

SYSTEM DIAGRAM



TECHNICAL SPECIFICATIONS

Dimensions (mm)	h: 164 x 111 x 31	Connections	2x RJ45 (CAN bus)
	r: 160 x 128.5 (3U) x 30 (6HP)		1x RJ45 (PoE, PoE+)
Housing	Casing (h) or rack-mount (i)		8x phoenix screw (I/Os)
Material	Steel		3x phoenix screws (error relay)
LEDs	Green, yellow	Protection class	IP30 (when mounted)
Buttons	1	Approvals	CE
Power supply	PoE (IEEE 802.3af)	Product standards	NEN-EN-IEC 60601-1:2006
	PoE+ (IEEE 802.3at)		NEN-EN-IEC 60601-1-2:2007
Supply voltage	24 Vdc		NEN-IEC 60601-1-8:2007
Power consumption	12.95 - 25.5W	Product regulations	93/42/EEC concerning medical
Operating temperature	0 °C to 40 °C		devices (14 June 1993)
Operating humidity (RH)	10% - 95% NC		
Storage temperature	0 °C to 65 °C		
Storage humidity (RH)	10% - 95% NC		

Document ID C8101-1709 | Subject to change without prior notice.