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GB GATEWAY - DATA LOGGER Instruction manual

ZH 网关数据记录器手册

EXCGLB01 – EXCGLB02 EXCGLB03



WARNING!

- Carefully read the manual before the installation or use.
- This equipment is to be installed by qualified personnel, complying to current standards, to avoid damages or safety hazards.
- Before any maintenance operation on the device, remove all the voltages from measuring and supply inputs and short-circuit the CT input terminals.
- The manufacturer cannot be held responsible for electrical safety in case of improper use of the equipment.
- Products illustrated herein are subject to alteration and changes without prior notice. Technical data and descriptions in the documentation are accurate, to the best of our knowledge, but no liabilities for errors, omissions or contingencies arising there from are accepted.
- A circuit breaker must be included in the electrical installation of the building. It must be installed close by the equipment and within easy reach of the operator. It must be marked as the disconnecting device of the equipment: IEC/EN 61010-1 § 6.11.3.1
- Clean the device with a soft dry cloth; do not use abrasives, liquid detergents or solvents.



ATTENTION !

- Lire attentivement le manuel avant toute utilisation et installation.
- Ces appareils doivent être installés par un personnel qualifié, conformément aux normes en vigueur en matière d'installations, afin d'éviter de causer des dommages à des personnes ou choses.
- Avant toute intervention sur l'instrument, mettre les entrées de mesure et d'alimentation hors tension et court-circuiter les transformateurs de courant.
- Le constructeur n'assume aucune responsabilité quant à la sécurité électrique en cas d'utilisation impropre du dispositif.
- Les produits décrits dans ce document sont susceptibles d'évoluer ou de subir des modifications à n'importe quel moment. Les descriptions et caractéristiques techniques du catalogue ne peuvent donc avoir aucune valeur contractuelle.
- Un interrupteur ou disjoncteur doit être inclus dans l'installation électrique du bâtiment. Celui-ci doit se trouver tout près de l'appareil et l'opérateur doit pouvoir y accéder facilement. Il doit être marqué comme le dispositif d'interruption de l'appareil : IEC/EN 61010-1 § 6.11.3.1.
- Nettoyer l'appareil avec un chiffon doux, ne pas utiliser de produits abrasifs, détergents liquides ou solvants.



ACHTUNG!

- Dieses Handbuch vor Gebrauch und Installation aufmerksam lesen.
- Zur Vermeidung von Personen- und Sachschäden dürfen diese Geräte nur von qualifiziertem Fachpersonal und unter Befolgung der einschlägigen Vorschriften installiert werden.
- Vor jedem Eingriff am Instrument die Spannungszufuhr zu den Messeingängen trennen und die Stromwandler kurzschließen.
- Bei zweckwidrigem Gebrauch der Vorrichtung übernimmt der Hersteller keine Haftung für die elektrische Sicherheit.
- Die in dieser Broschüre beschriebenen Produkte können jederzeit weiterentwickelt und geändert werden. Die im Katalog enthaltenen Beschreibungen und Daten sind daher unverbindlich und ohne Gewähr.
- In die elektrische Anlage des Gebäudes ist ein Ausschalter oder Trennschalter einzubauen. Dieser muss sich in unmittelbarer Nähe des Geräts befinden und vom Bediener leicht zugänglich sein. Er muss als Trennvorrichtung für das Gerät gekennzeichnet sein: IEC/EN 61010-1 § 6.11.3.1.
- Das Gerät mit einem weichen Tuch reinigen, keine Scheuermittel, Flüssigreiniger oder Lösungsmittel verwenden.



ADVERTENCIA

- Leer atentamente el manual antes de instalar y utilizar el regulador.
- Este dispositivo debe ser instalado por personal cualificado conforme a la normativa de instalación vigente a fin de evitar daños personales o materiales.
- Antes de realizar cualquier operación en el dispositivo, desconectar la corriente de las entradas de alimentación y media, y cortocircuitar los transformadores de corriente.
- El fabricante no se responsabilizará de la seguridad eléctrica en caso de que el dispositivo no se utilice de forma adecuada.
- Los productos descritos en este documento se pueden actualizar o modificar en cualquier momento. Por consiguiente, las descripciones y los datos técnicos aquí contenidos no tienen valor contractual.
- La instalación eléctrica del edificio debe disponer de un interruptor o disyuntor. Éste debe encontrarse cerca del dispositivo, en un lugar al que el usuario pueda acceder con facilidad. Además, debe llevar el mismo marcado que el interruptor del dispositivo (IEC/EN 61010-1 § 6.11.3.1).
- Limpiar el dispositivo con un trapo suave; no utilizar productos abrasivos, detergentes líquidos ni disolventes.



UPOZORNĚNÍ

- Návod se pozorně pročtěte, než začnete regulátor instalovat a používat.
- Tato zařízení smí instalovat kvalifikovaní pracovníci v souladu s platnými předpisy a normami pro předcházení úrazů osob či poškození věcí.
- Před jakýmkoli zásahem do přístroje odpojte měřicí a napájecí vstupy od napětí a zkratujte transformátory proudu.
- Výrobce nenese odpovědnost za elektrickou bezpečnost v případě nevhodného používání regulátoru.
- Výrobky popsané v tomto dokumentu mohou kdykoli projít úpravami či dalším vývojem. Popisy a údaje uvedené v katalogu nemají proto žádnou smluvní hodnotu.
- Spínač či odpojovač je nutno zabudovat do elektrického rozvodu v budově. Musí být nainstalované v těsné blízkosti přístroje a snadno dostupné pracovníkem obsluhy. Je nutno ho označit jako vypínací zařízení přístroje: IEC/EN 61010-1 § 6.11.3.1.
- Přístroj čistěte měkkou utěrkou, nepoužívejte abrazivní produkty, tekutá čistidla či rozpouštědla.



AVVERTIZARE!

- Cititi cu atentie manualul înainte de a instala sau utiliza.
- Acest echipament va fi instalat de personal calificat, în conformitate cu standardele actuale, pentru a evita deteriorări sau pericole.
- Înainte de efectuarea oricărei operațiuni de întreținere asupra dispozitivului, îndepărtați toate tensiunile de la intrările de măsurare și de alimentare și scurtcircuitați bornele de intrare CT.
- Producătorul nu poate fi considerat responsabil pentru siguranța electrică în caz de utilizare în corectă a echipamentului.
- Produsele ilustrate în prezent sunt supuse modificărilor și schimbărilor fără notificare anterioară. Datele tehnice și descrierile din documentație sunt precise, în măsura cunoștințelor noastre, dar nu se acceptă nicio răspundere pentru erorile, omisiunile sau evenimentele neprevăzute care apar ca urmare a acestora.
- Trebuie inclus un disjunctiv în instalația electrică a clădirii. Acesta trebuie instalat aproape de echipament și într-o zonă ușor accesibilă operatorului. Acesta trebuie marcat ca fiind dispozitivul de deconectare al echipamentului: IEC/EN 61010-1 § 6.11.3.1.
- Curățați instrumentul cu un material textil moale și uscat; nu utilizați substanțe abrazive, detergenți lichizi sau solvenți.



ATTENZIONE!

- Leggere attentamente il manuale prima dell'utilizzo e l'installazione.
- Questi apparecchi devono essere installati da personale qualificato, nel rispetto delle vigenti normative impiantistiche, allo scopo di evitare danni a persone o cose.
- Prima di qualsiasi intervento sullo strumento, togliere tensione dagli ingressi di misura e di alimentazione e cortocircuitare i trasformatori di corrente.
- Il costruttore non si assume responsabilità in merito alla sicurezza elettrica in caso di utilizzo improprio del dispositivo.
- I prodotti descritti in questo documento sono suscettibili in qualsiasi momento di evoluzioni o di modifiche. Le descrizioni ed i dati a catalogo non possono pertanto avere alcun valore contrattuale.
- Un interruttore o disgiuntore va compreso nell'impianto elettrico dell'edificio. Esso deve trovarsi in stretta vicinanza dell'apparecchio ed essere facilmente raggiungibile da parte dell'operatore. Deve essere marchiato come il dispositivo di interruzione dell'apparecchio: IEC/EN 61010-1 § 6.11.3.1.
- Pulire l'apparecchio con panno morbido, non usare prodotti abrasivi, detergenti liquidi o solventi.



UWAGA!

- Przed użyciem i instalacją urządzenia należy uważnie przeczytać niniejszą instrukcję.
- W celu uniknięcia obrażeń osób lub uszkodzenia mienia tego typu urządzenia muszą być instalowane przez wykwalifikowany personel, zgodnie z obowiązującymi przepisami.
- Przed rozpoczęciem jakichkolwiek prac na urządzeniu należy odłączyć napięcie od wejść pomiarowych i zasilania oraz zewrzeć zaciski przekładnika prądowego.
- Producent nie przyjmuje na siebie odpowiedzialności za bezpieczeństwo elektryczne w przypadku niewłaściwego użytkowania urządzenia.
- Produkty opisane w niniejszym dokumencie mogą być w każdej chwili udoskonalone lub zmodyfikowane. Opisy oraz dane katalogowe nie mogą mieć w związku z tym żadnej wartości umownej.
- W instalacji elektrycznej budynku należy uwzględnić przełącznik lub wyłącznik automatyczny. Powinien on znajdować się w bliskim sąsiedztwie urządzenia i być łatwo osiągalny przez operatora. Musi być oznaczony jako urządzenie służące do wyłączania urządzenia: IEC/EN 61010-1 § 6.11.3.1.
- Urządzenie należy czyścić miękką szmatką, nie stosować środków ściernych, płynnych detergentów lub rozpuszczalników.



警告!

- 安装前请仔细阅读手册。
- 该设备应符合现行标准的合格人员安装，以避免损坏或安全隐患。
- 在对设备进行任何维护操作之前，请去除测量电源输入的所有电压，并将CT输入端子短路。
- 如果设备使用不当，制造商对电气安全不承担责任。
- 此处所示的产品可能会发生更改，恕不另行通知。文中技术数据和说明信息准确，但因此产生的错误、遗漏或意外事件不承担任何责任。
- 建筑物的电气装置中必须包括断路器。它必须安装在附近设备和操作员容易接触到的地方。
- 必须将其标记为设备的断开装置：
IEC/EN 61010-1 § 6.11.3.1
- 用柔软的干布清洁设备；不要使用研磨剂、液体洗涤剂或溶剂。



ПРЕДУПРЕЖДЕНИЕ!

- Прежде чем приступать к монтажу или эксплуатации устройства, внимательно ознакомьтесь с содержанием настоящего руководства.
- Во избежание травм или материального ущерба монтаж должен осуществляться только квалифицированным персоналом в соответствии с действующими нормативами.
- Перед проведением любых работ по техническому обслуживанию устройства необходимо обесточить все измерительные и питающие входные контакты, а также замкнуть накоротко входные контакты трансформатора тока (ТТ).
- Производитель не несет ответственность за обеспечение электробезопасности в случае ненадлежащего использования устройства.
- Изделия, описанные в настоящем документе, в любой момент могут подвергнуться изменениям или усовершенствованиям. Поэтому каталожные данные и описания не могут рассматриваться как действительные с точки зрения контрактов.
- Электрическая сеть здания должна быть оснащена автоматическим выключателем, который должен быть расположен вблизи оборудования в пределах доступа оператора. Автоматический выключатель должен быть промаркирован как отключающее устройство оборудования: IEC/EN 61010-1 § 6.11.3.1.
- Очистку устройства производить с помощью мягкой сухой ткани, без применения абразивных материалов, жидких моющих средств или растворителей.



DİKKAT!

- Montaj ve kullanımdan önce bu el kitabını dikkatlice okuyunuz.
- Bu aparatlar kişilere veya nesnelere zarar verme ihtimaline karşı yürürlükte olan sistem kurma normlarına göre kalifiye personel tarafından monte edilmelidirler.
- Aparata (cihaz) herhangi bir müdahale bulunmadan önce ölçüm girişlerinde gerilimi kesip akım transformatorlerinde kısa devreyaptırınız.
- Üretici aparatın hatalı kullanımından kaynaklanan elektriksel güvenliği ait sorumluluk kabul etmez.
- Bu dokümanda tarif edilen ürünler her an evrimlere veya değişimlere açıktır. Bu sebeple katalogdaki tarif ve değerler herhangi bir bağlayıcı değeri haiz değildir.
- Binaların elektrik sisteminde bir anahtar veya şalter bulunmalıdır. Bu anahtar veya şalter operatörün kolaylıkla ulaşabileceği yakın bir yerde olmalıdır. Aparat (cihaz) devreden çıkartma görevi yapan bu anahtar veya şalterin markası: IEC/EN 61010-1 § 6.11.3.1.
- Aparat (cihaz) sıvı deterjan veya solvent kullanılarak yumuşak bir bez ile silinmez; aşındırıcı temizlik ürünleri kullanılmayın.



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简介

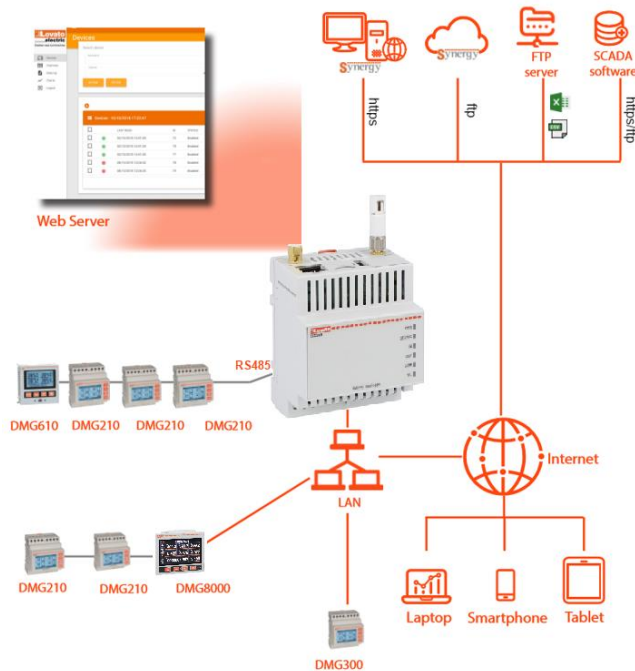
EXCGLB...网关数据记录器能够同时从通过以太网或RS485串行端口连接的现场设备收集数据。我们支持Modbus RTU, ASCII和TCP协议。您可以通过访问Synergy Cloud服务或直接连接到以太网端口并使用浏览器访问数据。您也可以将数据发送到第三方远程HTTP或FTP服务器。数据发送的互联网访问可以通过以太网端口, Wi-Fi接入点或通过4G移动网络 (LTE) 进行, 具体取决于所选型号。

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INTRODUCTION

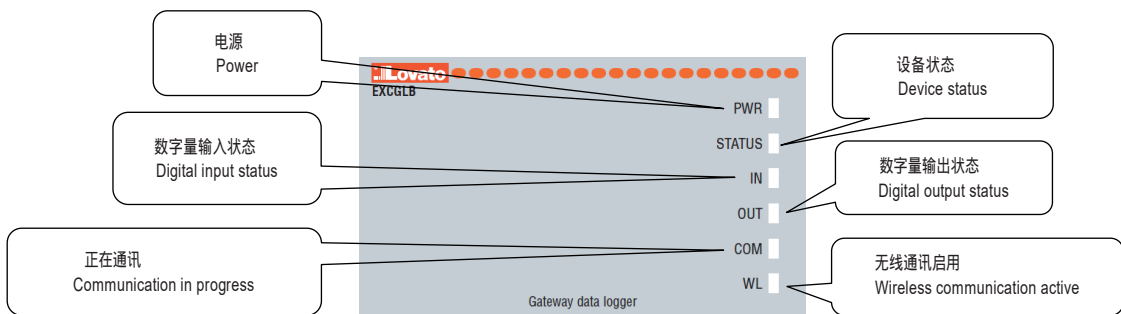
The EXCGLB... gateway data loggers are able to collect data from field devices connected via ethernet or RS485 serial port, even simultaneously. They support Modbus RTU, ASCII and TCP protocols. The data can be consulted by accessing the Synergy Cloud service or by connecting directly to the Ethernet port and using a browser. It is also possible to send data to third-party remote http or ftp servers. Access to the internet for sending data can take place via the ethernet port, Wi-Fi access point or via the 4G (LTE) mobile network, depending on the selected model.



说明

- 网关数据记录器。
- 供电电源 12...24VDC。
- RS485串行端口，采用Modbus RTU（主站）协议。
- 以太网端口数量：
 - EXCGLB01和EXCGLB02：1个
 - EXCGLB03：2个独立端口
 - 支持 http, https, mqtt, ftp, sftp协议
 - VPN客户端
 - Modbus TCP主站（设备侧）。
- 支持洛瓦托电气和第三方设备
- EXCGLB01 的 Wi-Fi 接入点供用户连接
- EXCGLB02 带有 GNSS（GPS）地理定位功能
- EXCGLB02和EXCGLB03支持4G（LTE）移动网络连接
- 1 数字量输入。
- 1 模拟量输入。
- 1 静态输出 24VDC。
- 6 诊断用前面板指示灯：
 - 电源
 - 设备状态
 - 数字量输入状态
 - 数字量输出状态
 - 正在通讯
 - 无线通讯启用
- 4 模 数 宽 度 (72mm)。

前面板指示灯功能



APPROCCIO ALLA CYBER SECURITY

- 符合 IEC62443-4-2:
- 双以太网，相互独立端口 (EXCGLB03)
 - 无线和以太网，相互独立 (EXCGLB01)
 - 独立的 4G (LTE) 网络 (EXCGLB02 和 EXCGLB03)
 - 从独立于应用程序的内存区域安全启动
 - 通过代理服务器访问
 - 访问最少数量的服务（端口）
 - 密码管理：
 - 首次访问时强制修改
 - 遇暴力攻击临时锁闭
 - 最低复杂度需求
 - 使用SSL协议进行数据交换
 - 数字化签名固件更新
 - 日志文件跟踪关键操作
 - 输入数据预处理
- 必须通过在安装EXCGLB的网络中设置多级防御来保证服务的可用性、数据的完整性和机密性，评估必须激活哪些补偿方法（防火墙、网络分割、物理保护等）才能达到所需的安全级别

连接

EXCGLB... 需外接24VDC电源供电，现场可以通过以太网和串口RS485连接多达31个设备单元，SIM卡需客户外购，不随设备提供。

DESCRIPTION

- Gateway data logger.
- Auxiliary power supply 12...24VDC.
- RS485 serial port with Modbus RTU (master) protocol.
- Ethernet ports:
 - 1 for EXCGLB01 and EXCGLB02
 - 2 independent ports for EXCGLB03
 - http, https, mqtt, ftp, sftp protocols
 - VPN client
 - Modbus TCP Master (device side).
- Support for LOVATO Electric and third-party devices.
- Connection to Wi-Fi access points for EXCGLB01.
- Geolocation function via GNSS systems (GPS) for EXCGLB02.
- Connection to 4G (LTE) mobile networks for EXCGLB02 and EXCGLB03.
- 1 digital input.
- 1 analog input.
- 1 static 24VDC output.
- 6 frontal leds for diagnostic:
 - Power
 - Device status
 - Digital input status
 - Digital output status
 - Communication in progress
 - Wireless communication active.
- 4 modules (72mm wide).

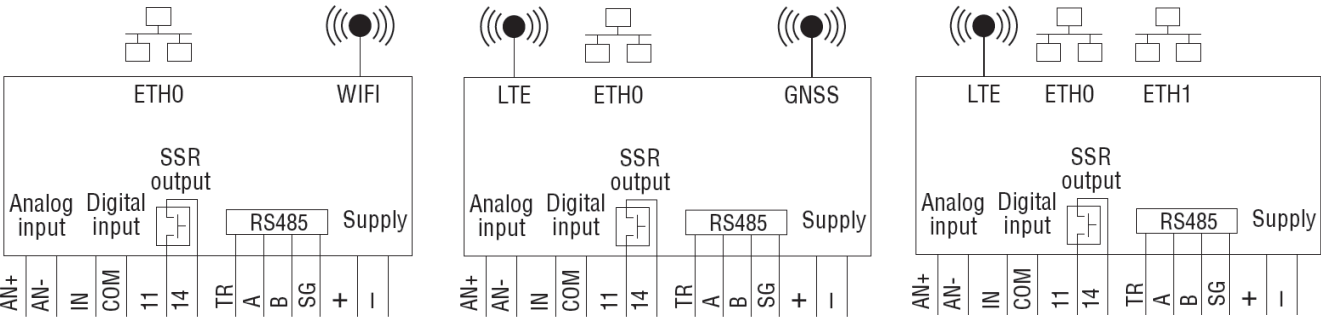
FRONTAL LED FUNCTIONS

APPROACH TO CYBER SECURITY

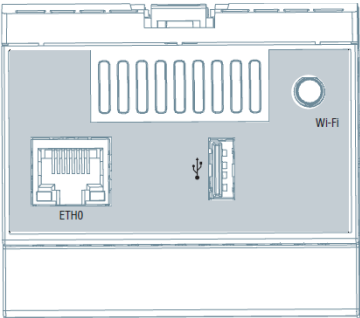
- According to IEC62443-4-2:
- Dual ethernet, independent ports (EXCGLB03)
 - Wi-Fi and ethernet, independent networks (EXCGLB01)
 - Independent 4G mobile network (EXCGLB02 and EXCGLB03)
 - Safe boot from memory which is independent from the application area
 - Proxy server access
 - Minimum services access (ports)
 - Password management:
 - mandatory modification at first access
 - temporary lock against brutal-force attacks
 - minimum complexity requirements
 - Use of SSL protocol for data exchange
 - Digitally signed firmware update
 - Log file to trace all the critical actions
 - Input data pre-processing.
- The availability of services, the integrity and the confidentiality of data must be guaranteed by multiple levels of defense to be set up in the network where EXCGLB... is installed, evaluating which compensation methods (firewall, network segmentation, physical protections, etc.) must be activated to achieve the desired level of security.

CONNECTIONS

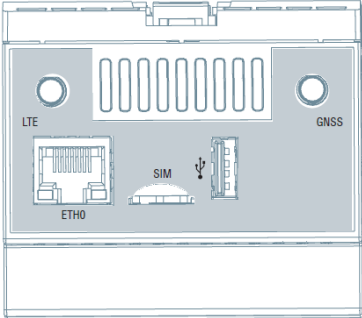
EXCGLB... should be connected to a 24VDC power supply. The devices in the field can be connected to both the ethernet and the RS485 serial ports with a maximum allowed number of 31 units. The SIM card is not provided.



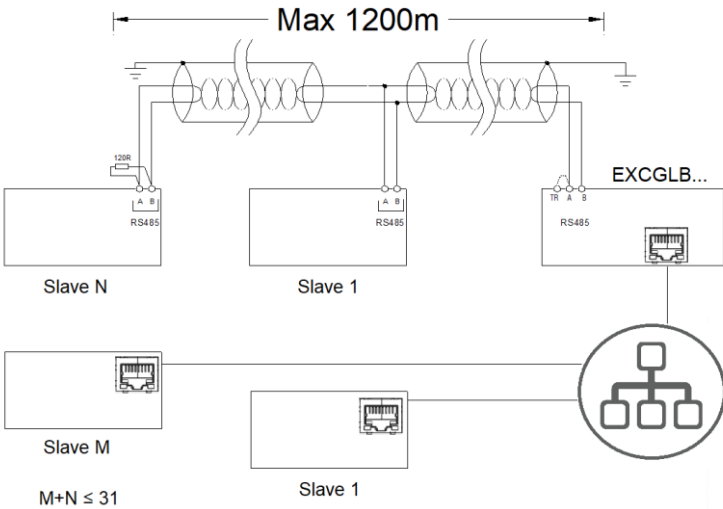
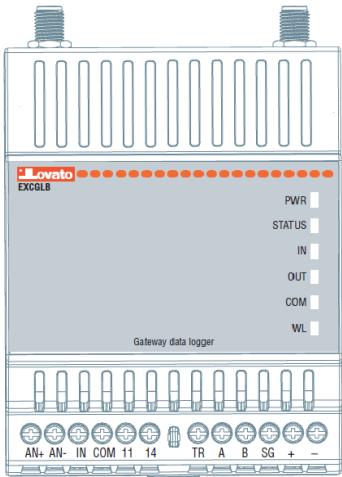
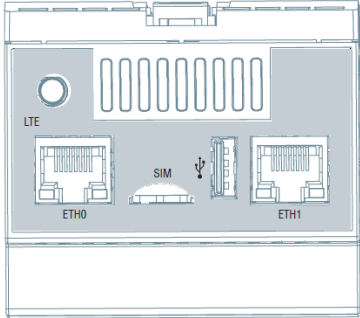
EXCGLB01



EXCGLB02



EXCGLB03



现场配置设备参数
现场设备需要必要的网络配置才可以连接EXCGLB...

所有要修改的参数都属于不同设备型号共享的通信菜单。为了让EXCGLB... 自动识别并启用连接到RS485和以太网网络的设备，要为它们分配一个唯一的“串行节点地址”，这点非常重要。可以选择“信道”章节（见下表）中设置的范围内的所有值。

在以太网端口上，数据记录器网关在端口1000上打开服务，现场设备都可以访问。

CONFIGURATIONS FOR THE DEVICES IN THE FIELD
The devices in the field need a minimum network configuration to be supported by EXCGLB...
All the parameters to be modified belong to the communication menu which is shared by different device models. In order to let EXCGLB... automatically recognize and enable the devices which are connected to both RS485 and ethernet networks, it is important to assign to them a unique "serial node address". All values included between the range set in "Channel" section (see below) can be selected.
On the ethernet port the gateway - data logger opens a service on port 1000 which should be accessible by all the devices in the field.

连接到串口的设备 - Devices connected to serial port

串行地址	Serial node address	Inserire un numero unico nella rete RS485+LAN Enter a unique number in the RS485+LAN network
速率	Speed	38400 bps
数据格式	Data format	8bit - None (Default)
停止位	Stop bit	1 (Default)
协议	Protocol	Modbus RTU (Default)

连接到LAN的设备 - Devices connected to LAN networks

串行地址	Serial node address	在LAN+RS485网络中输入一个唯一的数字 Enter a unique number in the LAN+RS485 network
协议	Protocol	Modbus TCP
IP地址	IP address	*
子网掩码	Subnet mask	*
TCP端口	TCP port	1001 (Default默认)
客户端/服务器	Client/Server	Client
远程IP地址	Remote IP address	输入分配给 EXCGLB... 的地址. Enter the IP address assigned to EXCGLB...
远程IP端口	Remote TCP port	1000
网关IP地址	Gateway IP address	*

* 0.0.0.0 启用 DHCP 客户端功能，否则请输入网络管理员分配的地址。
0.0.0.0 to enable DHCP client function, set the IP address assigned by the administrator otherwise.

网络接口
EXCGLB... 以太网端口默认设置如下：

WEB INTERFACE ACCESS
EXCGLB... is equipped with ethernet ports with the following default settings:

ETH0	192.168.0.1
ETH1 (EXCGLB03)	DHCP client

这些端口相互独立，可用于连接设备或通过浏览器访问集成的 Web server 界面。
我们建议您将浏览器更新到最新版本，以充分利用可用功能。

The ports are independent. They can be used both for device connection and for access to the built-in web server through a browser.
An upgrade to the latest browser version is suggested in order to fully take advantage of the available functionalities.

HTTPS出厂默认启用，用于访问Web界面。EXCGLB...具有自动签名的证书，因此连接时会显示安全消息，接受则进入网站页面。

HTTPS is enabled by default to access the web interface. EXCGLB... is equipped with a certificate with automatic signature, thus a security message is shown while connecting. Accept to go forward to the site page.

通过在浏览器地址栏中输入分配给用户连接的端口的地址，将显示登录页面并需要登录信息。默认值为：

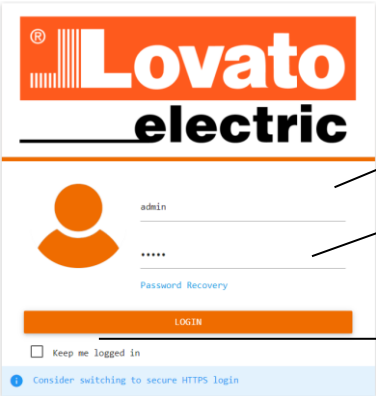
By entering in a browser address bar the address assigned to the port which the user is connected to, the login page is shown and credentials are required. The default values are:

- 用户名 = admin
- 密码 = admin

- username = admin
- password = admin

首次登录时，需要更改密码。按照屏幕上的说明进行操作，以满足最低要求的密码复杂度。
在连续输错5次后，访问将被锁定60秒；再连续5次输错后，访问将被锁定5分钟。如果再次连续5次输入失败，锁定将变为60分钟。

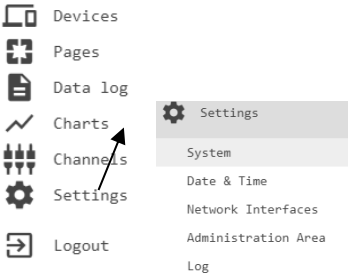
At the first log in, a password change is required. Follow the on-screen instructions to meet the minimum required complexity.
After 5 consecutive incorrect entry attempts, access is locked for 60 seconds. After further 5 consecutive incorrect entries, access is locked for 5 minutes. If entry fails for another 5 consecutive attempts, the lock becomes 60 minutes.



- 用户名Username
- 密码Password.
忘记了密码，请单击“Password recovery(恢复密码)”并按照屏幕说明操作
In case the password is lost, click on “Password recovery” and follow the instructions at display.
- 即使会话超时（15分钟）已过，也要保持用户登录。
Keep the user logged in even when the session time-out (15 minutes) is elapsed.

登录后，可以访问下述网页，通过点击相应的菜单进行访问。

After a successful login, the following web pages are available and reachable by clicking on the correspondent menu item.



设备页
在可能的情况下，网关数据记录器会自动填写设备列表。搜索在以太网端口上持续运行，搜索同时也在 EXCGLB...启动时在串行端口上执行。如果设备未被识别，可以通过单击以下图标手动添加新设备：

DEVICES PAGE
The device list when possible is automatically compiled by the gateway data logger. The search is continuously run on the ethernet port, while it is performed at the start up of EXCGLB... on the serial port. If a device has not been recognized, it is possible to manually add a new device by clicking on the following icon:



点击可用的一个或多个可用的设备图标

By clicking on one or more devices the icons which can be used are enabled.

	手动添加新设备	Manually adds a new device.
	启动连接设备的自动查找尝试。该操作仅适用于某些型号，可能需要几分钟。	Launch the automatic discovery attempt for the connected devices. The operation is possible for some of the models only and it can take several minutes.
	显示包含设备的数据日志。	Goes to the data logs which the device is included in.
	显示设备实时页面。	Goes to live pages supported by the device.
	修改设备定义 • 说明：用户可以为设备定义一个专用名称 • 型号：指示连接设备的型号；一旦创建了设备，就可以通过在共享所选应用场景的设备中选择一个新的设备来更改型号。 • 信道：选择连接类型 • modbus节点：用于Modbus协议的节点地址，每个设备唯一 • 应用场景：选择需要的测量值	Modify the device definition. • <i>Description</i> : the user can define an identity name for the device. • <i>Model</i> : indicates the model of the connected device; once the device has been created, the model can be change by selecting a new one among the ones which share the selected scenario. • <i>Channel</i> : selection of the connection type. • <i>Modbus node</i> : identity number of the device for the modbus protocol; each device must have a unique number. • <i>Scenario</i> : selection of the group of measures to be collected.
	克隆设备	Clone the device.
	启动设备	Enable the device.
	禁用设备	Disable the device.
	删除设备。 删除数据日志中的引用。如果一个数据日志再无其他设备引用，则这个数据日志也被删除。	Delete the device. The references in the data logs are deleted. If a data log remains without further device references, it is deleted, too.

每个设备都有一个图标，指示5种状态。

Each device has associated an icon which can have 5 states.

	设备已连接，准备好采集数据	The device is on-line, ready for data collection
	设备离线，请确认连接和通讯是否正常	The device off-line, verify the connections and the communication parameters
	设备已禁用	The device is disabled
	设备请求应用场景分配，请点击到设备配置	The device requires to have a scenario assigned, go to device configuration through .
	设置的设备与识别出的型号不符，请移动鼠标到图标，一条工具提示将会显示识别的型号。	The set device does not match with the recognized model. By moving the mouse pointer on , a tooltip shows the recognized model.

Devices - 02/12/2020 15:59:06										
		LAST READ	ID	STATUS	SCENARIO	DESCRIPTION	MODEL	SERIAL NUMBER	CHANNEL	MODBUS NODE ADDRESS
☐		02/12/2020 15:59:05	46	Enabled	Basic	LRD20-SP11	LRD20 (0,99)		Serial port	11
☐		02/12/2020 15:54:02	45	Enabled	Automatic transfer switch	ATL900	ATL900 (4,5)	17140027	Serial port	8
		Defined model does not match with actual model ATL900 (6,6)								
						RGK800SA	RGK800SA (18,18)	19060666	Serial port	7
☐		02/12/2020 15:55:01	28	Disabled	PFC	DCRG8	DCRG8 (11,99)	18400666	10.39.0.232:1001	1
☐		09/11/2020 14:48:02	27	Enabled	PFC	DCRL8	DCRL8 (3,99)	18110218	Serial port	3
Page 1 Rows per page 5 1-5 of 11										

数据日志页
数据日志是带有时间戳信息的数据表。数据表在EXCGLB...数据库中定义，并根据已识别的设备型号自动可用。
通过单击一个或多个数据日志，可以启用可用的图标。

DATA LOGS PAGE
Data logs are data tables with timestamp information. The data tables are defined in EXCGLB... database and become automatically available according to the model of the device which has been recognized.
By clicking on one or more data logs the icons which can be used are enabled.

	访问最新的数据日志记录	Goes to the most recent data in the data log
	在数据日志中按日期进行数据搜索。数据可以从连接到web界面的PC导出为CSV或Excel文件	Goes to data search by date in the data log. The data can be exported to CSV or Excel files from the PC which is connected to the web interface
	显示所选数据日志图表	Shows the charts based on the selected data log
	选择文件需要的测量值，将文件定期发送到远程服务器（例如 Synergy）	Selects the measures to be included in the file which is periodically sent to remote servers (i.e. Synergy)
	启用数据日志	Enable the data log
	禁用数据日志	Disable the data log
	删除数据日志 与数据日志关联的图标一并删除	Delete the data log. The charts based on a deleted data log are deleted, too.

Data log - Filter

Device

☒ 401 - PT Generale Cucina

☒ 402 - PT Luce Cucina

☒ 403 - PT Ausiliari Cucina

☒ 421 - PP Generale Lovato Cafè

TIMESTAMP

DEVICE

SEARCH

02/12/2020 15:23:54

DATE	401 - PT GENERALE CUCINA - KW EQV	401 - PT GENERALE CUCINA - PF TOT	401 - PT GENERALE CUCINA - KVAR EQV	401 - PT GENERALE CUCINA - KW L1	401 - PT GENERALE CUCINA - A L1	401 - PT GENERALE CUCINA - V L1	401 - PT GENERALE CUCINA - PF L1	401 - PT GENERALE CUCINA - KVAR L1	401 - PT GENERALE CUCINA - KW L2	401 - PT GENERALE CUCINA - A L2	401 - PT GENERALE CUCINA - V L2	401 - PT GENERALE CUCINA - PF L2	401 - PT GENERALE CUCINA - KVAR L2	401 - PT GENERALE CUCINA - KW L3	401 - PT GENERALE CUCINA - A L3	4
02/12/2020 15:20:00	2.76	0.72	2.66	0.72	4.84	227.96	0.65	0.84	1.77	10.60	226.70	0.74	1.62	0.26	1.46	G
02/12/2020 15:15:00	2.22	0.80	1.67	0.38	2.33	227.86	0.72	0.37	1.15	6.12	227.01	0.82	0.79	0.70	3.79	C
02/12/2020 15:10:00	2.89	0.74	2.60	0.97	6.63	228.46	0.64	1.16	1.55	8.79	227.75	0.78	1.26	0.36	1.77	
02/12/2020 15:05:00	2.22	0.80	1.65	0.38	2.33	227.39	0.72	0.37	1.48	8.15	226.28	0.80	1.11	0.36	1.75	
02/12/2020 15:00:00	3.62	0.76	3.11	1.41	9.02	227.20	0.68	1.50	1.22	6.36	226.89	0.85	0.76	0.98	5.72	
02/12/2020 14:55:00	3.27	0.82	2.29	1.73	8.49	228.46	0.89	0.88	1.28	7.66	228.02	0.73	1.20	0.26	1.46	
02/12/2020 14:50:00	5.38	0.93	2.18	1.92	9.96	228.03	0.84	1.21	0.58	4.19	227.90	0.77	0.47	2.96	13.19	
02/12/2020 14:45:00	13.12	0.99	1.51	4.87	22.59	226.54	0.95	1.58	3.33	15.06	226.40	0.98	0.72	4.94	22.03	
02/12/2020 14:40:00	5.47	0.93	2.21	1.65	8.19	227.13	0.89	0.86	0.79	4.87	226.55	0.72	0.77	3.02	13.57	

实时页面
实时页面允许用户查看所选设备最重要指标的瞬时值：每个页面都允许对设备进行重新选择。
例如，以下页面可用于显示测量装置测量到数值。

LIVE PAGES
Live pages let the user see the instantaneous values of the most important measures for the selected device: each page consent the choice of the device among the ones which are compatible.
For example, the following page is available for the measuring instruments.

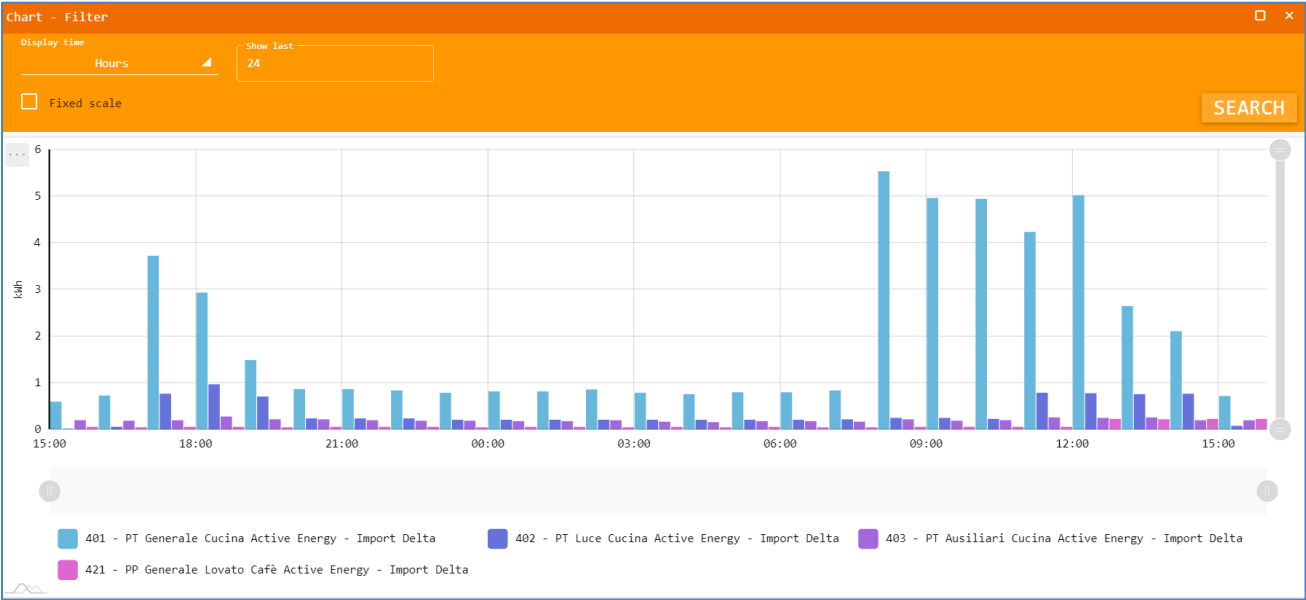
图表页
在一个或多个图表图标上单击可以选择相应页面

CHARTS PAGE
By clicking on one or more charts the icons which can be used are enabled.

	显示最新的数据图表	Shows the chart with the most recent data
	按图表中的日期进行数据搜索	Goes to data search by date in the chart
	显示图表所关联的数据日志	Shows the data log which the chart is based on

Lovato electric

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信道
现场设备的物理通信信道（RS485串行端口和以太网）由参数描述构成，可以根据需要进行修改。

- 信道 1: 串行端口**
- 速率：波特率设置。
 - 格式：传输字符的位数
 - 奇偶校验：控制位
 - 停止位：停止位数量
 - 协议：modbus协议类型，通常为RTU。EXCGLB...尝试自动识别，如果失败，则采用所选协议。
-
- 起始和最后一个modbus地址：自动识别时，EXCGLB...查询包括起始和终点 modbus 地址在内的所有串行节点。
 - 超时：在设定的时间之后，modbus查询被认为已经过期，因此被中止。

- 信道 2: 以太网端口**
- 协议：modbus协议类型，通常为TCP。EXCGLB...尝试对每个以太网信道（套接字）进行自动识别，如果失败，则采用所选协议。
 - 起始和最后一个modbus地址：在自动发现过程中，EXCGLB...查询包含的起始地址和最后一个地址之间的所有串行节点。
 - 超时：在设定时间之后，modbus查询被认为已经过期，因此被中止；在网络速度较慢的情况下数值要设大一些。

设置
本章节阐述所有与EXCGLB...有关设置。

系统
显示一些系统信息（例如：内存可用性）。无需设置。

日期和时间
EXCGLB...使用的日期和时间，可以修改。信息在数据日志中可用。可以激活NTP服务器访问实现自动时间更新（需要互联网长期连接）。

网络
可以修改默认网络设置，使网关数据记录器满足客户的网络要求。

通用设置
可以修改EXCGLB...的网络名称，便于在Synergy Cloud上清楚地识别它。修改名称时，不要使用“空格”或其他特殊字符（%、\$等）。

- ETH0 和 ETH1**
- DHCP：如果网络中可用的DHCP服务器必须为端口分配IP地址，则应启用该选项。
-
- 地址：输入要分配给端口的可能静态IP地址。
 - 网络掩码：输入可能的子网定义。
 - 网关：输入可能的网络网关地址。
- 如果禁用DHCP选项，则由管理员分配地址、网络掩码和网关值。与EXCGLB02和EXCGLB03型号的调制解调器关联的网络（ppp0）也有相同的参数，但它们是不可修改的，因为它们是由网络提供商直接管理的。

CHANNELS
The physical communication channels to the devices in the field (RS485 serial port and ethernet) are described by parameters which can be modified in case of need.

- Channel 1: serial port**
- Speed: baud rate settting.
 - Format: bit number of the transmitted character.
 - Parity: control bit.
 - Stop bit: number of stop bits.
 - Protocol: modbus protocol type, usually RTU. EXCGLB... tries the automatic recognition and in case of failure the selected protocol is adopted.
 - Starting and last modbus addresses: during the autodiscovery process, EXCGLB... queries all the serial nodes between the starting and the last addresses included.
 - Time-out: after the set time a modbus query is considered elapsed and therefore to be aborted.

- Channel 2: ethernet port**
- Protocol: modbus protocol type, usually TCP. EXCGLB... tries the automatic recognition per each ethernet channel (socket) and in case of failure the selected protocol is adopted.
 - Starting and last modbus addresses: during the autodiscovery process, EXCGLB... queries all the serial nodes between the starting and the last addresses included.
 - Time-out: after the set time a modbus query is considered elapsed and therefore to be aborted; increase the value in case of slow networks.

SETTINGS
This section is intended to manage all the settings relevant to EXCGLB....

System
Some system information is shown (i.e. memory availability). No setup is required.

Date & Time
Date and time which are used by EXCGLB... can be modified. The information works inside the data logs. NTP server access can be activated to achieve the automatic time update (a permanent internet connection is required).

Network
The default network settings can be modified to let the gateway data-logger suit the customer network requirements.

General settings
It is possible to modify the network name of EXCGLB... in order to clearly identify it at Synergy Cloud. **While modifying the name, do not use “space” or other special characters (% , \$, etc...).**

- ETH0 and ETH1**
- DHCP: the option should be enabled if a DHCP server available in the network must assign an IP address to the port.
 - Address: enter the possible static IP address to be assigned to the port.
 - Netmask: enter the possible subnet definition.
 - Gateway: enter the possible network gateway address.
- The address, netmask and gateway values are assigned by the administrator if the DHCP option is disabled. The same parameters are available for the network (ppp0) associated with the modem for EXCGLB02 and EXCGLB03 models, but they are not modifiable because they are directly managed by the network provider.

移动网络设置 (EXCGLB02, EXCGLB03)

- 启用：启用或禁用调制解调器。
- SIM PIN: 如果需要，请输入SIM卡PIN码
- APN: 移动网络接入服务器（向SIM卡提供商索取信息）
- 漫游：允许调制解调器连接到与SIM卡预期网络不同的网络的选项。

移动网络状态 (EXCGLB02, EXCGLB03)

该章节报告移动网络的状态数据

DNS

用于解析URL字符串的DNS（域名系统）服务器列表。如果使用文件传输功能，请至少设置一个DNS服务器。

无线网络配置 (EXCGLB01)

- 检测到的可用的网络列表
- 输入无线网络密码

管理员权限区

数据文件发送时，管理本地用户访问网络接口和远程用户验证远程服务器的网关数据记录器。

- 本地管理：修改默认密码(admin)。
- 远程HTTP服务器
 - a. 远程服务器地址：包含采集数据的XML文件必须发送到的端点；
 - b. 用户名和密码：发送XML数据文件时在远程服务器上对设备进行身份验证的凭据；
 - c. 周期：数据发送和下一次发送之间的时间间隔。
- 远程MQTT服务器
 - a. 远程服务器地址：连接到MQTT代理的url；
 - b. 用户名和密码：在MQTT代理上对设备进行身份验证的凭据
- 远程FTP服务器
 - a. 远程服务器地址：是收集数据的CSV文件必须发送到的服务器地址；
 - b. 端口：FTP服务器的端口号；
 - c. 远程目录：将文件复制到此字段中定义的目录；如果目录不存在，则EXCGLB...尝试创建它（用户必须由服务器启用该操作）；
 - d. 用户名和密码：发送CSV数据文件时在远程服务器上对设备进行身份验证的凭据。
 - e. 数据文件：根据此设置，定期发送的数据按日或按月保存在同一文件中；EXCGLB...必须由服务器启用“append”命令；
 - f. 安全连接：选择是否应使用安全协议（SSL）发送数据。

注：

如果出现问题，可以下载三个数据日志文件，并在需要时发送给洛瓦托电气技术支持

Mobile network settings (EXCGLB02, EXCGLB03)

- Enable: modem activation or deactivation.
- SIM PIN: insert the SIM pin if required.
- APN: server for mobile network access (ask the SIM provider for information).
- Roaming: option to let the modem connect to networks which are different from the one expected for the SIM.

Mobile network status (EXCGLB02, EXCGLB03)

The section reports the status data of the mobile network.

DNS

It is the list of DNS (Domain Name System) servers to resolve URL strings. Set at least one DNS server if the file transfer function is used.

Wi-Fi network setup (EXCGLB01)

- The list of detected networks is available
- Enter the Wi-Fi network password.

Administration area

A local user to access the web interface and a remote user to authenticate the gateway data logger at a remote server when data file are sent are managed in this section.

- Local management: set values in order to modify the default password (admin).
- Remote HTTP server
 - a. remote server address: it is the end-point which XML file with the collected data has to be sent to;
 - b. User name and password: credentials to authenticate the device at the remote server when XML data file are sent;
 - c. Period: time interval between a data sending and the following one.
- Remote MQTT server
 - a. remote server address: url to connect to the MQTT broker;
 - b. User name and password: credentials to authenticate the device at the MQTT broker.
- Remote FTP server
 - a. Remote server address: it is the server address which CSV file with the collected data has to be sent to;
 - b. Port: port number for the FTP server;
 - c. Remote directory: the files are copied to the directory defined in this field; if the directory does not exist, EXCGLB... tries to create it (the user must be enabled for that operation by the server);
 - d. User name and password: credentials to authenticate the device at the remote server when CSV data file are sent.
 - e. Data file: the data which are periodically sent are saved in the same file by day or by month according to this setting; EXCGLB... must be enabled by the server for "append" command;
 - f. Secure connection: select if a secure protocol (SSL) should be used for data sending.

Log

In case of problems three data log files are available to be downloaded and sent to LOVATO Electric technical support if required.

远程服务器管理

通过网关数据记录器收集的数据可用于：

- Synergy Cloud（默认），用户订阅后；Synergy Cloud 监控文件每 24 小时发送一次;如果出现问题，将向帐户所有者发送一封带有问题通知的邮件；
- 在服务器上安装的 Synergy，通过在管理区域中配置的终端进行干预；
- 第三方HTTP服务器，总是修改端点；导出的文件是 XML 类型。文件方案可通过联系LOVATO Electric获得；
- FTP服务器，设置相应的参数；发送的文件是CSV格式。

软件更新

如果 EXCGLB... 中的软件应用程序发布了新版本，您需要从网站www.lovatoelectric.com对应的产品页面下载所需的文件。按以下步骤操作。

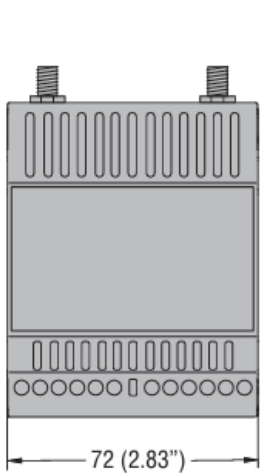
1. 通过网络浏览器访问http://<IP_EXCGLB>:3000/public/update-page.html
2. 选择下载的文件（“Choose file(选择文件)”按钮）并上传（“Upload file(上传文件)”按钮）。
3. 点击“Showfile(显示文件)”按钮检查文件是否存在。
4. 点击“Start update(开始更新)”按钮开始更新。
5. 更新需要几分钟，完成后，在PC上重新启动浏览器后，按CTRL+F5来刷新缓存

软件更新到最新版本的EXCGLB... 已就绪

应用场景

EXCGLB...自动识别新连接的设备，或通过手动创建新连接的设备，为用户提供可供选择的测量组列表。如果添加的设备只有一个，则EXCGLB...会自动选择，否则用户将被要求通过访问设备配置来指定兴趣组（Device (设备)→）。选择会自动创建相关的实时页面、数据日志和图表。详情请参阅附录A和B。

机械尺寸 [MM]



REMOTE SERVERS MANAGEMENT

The data collected through the gateway data logger can be addressed to:

- Synergy Cloud (default), after a user has been subscribed; Synergy Cloud monitors that the file is sent once every 24 hours; in case of problems, a mail with the problem notification is sent to the account owner;
- Synergy installed on a server, by changing the end-point configured in the administration area;
- third party http server, again by changing the end-point; the exported file is XML type. The file scheme is available by contacting LOVATO Electric;
- FTP server, by setting the relevant parameters; the sent file is CSV type.

SOFTWARE UPGRADE

In case of new software releases of the applications loaded in EXCGLB..., the upgrade files should be downloaded from www.lovatoelectric.com in the product page. Run the following steps in sequence.

1. Access via web browser to the address http://<IP_EXCGLB>:3000/public/update-page.html
2. Select the downloaded file (button "Choose file") and upload it (button "Upload file").
3. Verify the presence of the file by clicking on the "Show file" button.
4. Start the update by clicking on the "Start update" button.
5. The update takes a few minutes. Once finished, restart the browser on the PC and press the CTRL+F5 key combination to refresh the cache.

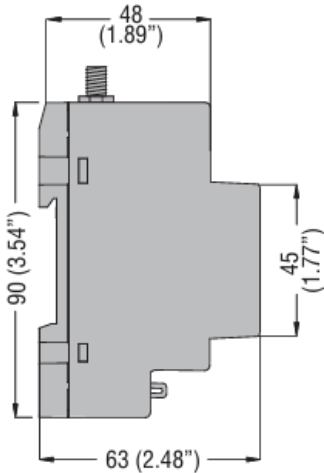
EXCGLB... is ready with the new update.

SCENARIOS

EXCGLB..., either with an automatic detection or a manual creation of a new device, prepares a list of measure groups which the user can choose. The selection is automatically performed by EXCGLB... if one choice only is available for the added device, the user must indicate the group of interest through the access to the device configuration (Device →) otherwise.

The selection causes the automatic creation of the relevant live pages, data logs and charts. See appendix A and B for an overview of scenarios' details.

MECHANICAL DIMENSIONS [MM]



技术特性		TECHNICAL CHARACTERISTICS	
供电 (端子 +, -)		Power supply (+, - terminals)	
额定电压 U_s	12-24V=	Rated voltage U_s	12-24V=
工作电压范围	8-36V=	Operating voltage range	8-36V=
功率耗散	10W	Power consumption/dissipation	10W
掉电保持	15msec @24V <5msec @12V	Immunity time for micro breakings	15msec @24V <5msec @12V
端子类型	螺丝 (固定)	Type of terminal	Screw (fixed)
端子数量	2	Number of terminals	2
导体截面积 (最小-最大)	0.2 - 2.5mm ² (24-12 AWG)	Conductor cross section (min - max)	0.2 - 2.5mm ² (24-12 AWG)
RS485串行端口 (端子TR, A, B, SG)		RS485 serial port (TR, A, B, SG terminals)	
端子类型	螺丝 (固定)	Type of terminal	Screw (fixed)
端子数量	4	Number of terminals	4
导体截面积 (最小-最大)	0.2 - 2.5mm ² (24-12 AWG)	Conductor cross section (min - max)	0.2 - 2.5mm ² (24-12 AWG)
数字量输入 (端子 COM, IN)		Digital input (COM, IN terminals)	
输入类型	NPN - 干接点 (8-36Vdc)	Input type	NPN - dry contact (8-36Vdc)
端子类型	螺丝 (固定)	Type of terminal	Screw (fixed)
端子数量	2	Number of terminals	2
导体截面积 (最小-最大)	0.2 - 2.5mm ² (24-12 AWG)	Conductor cross section (min - max)	0.2 - 2.5mm ² (24-12 AWG)
模拟量输入 (端子 AN+, AN-)		Analog input (AN+, AN- terminals)	
输入类型	0-10V=	Input type	0-10V=
端子类型	螺丝 (固定)	Type of terminal	Screw (fixed)
端子数量	2	Number of terminals	2
导体截面积 (最小-最大)	0.2 - 2.5mm ² (24-12 AWG)	Conductor cross section (min - max)	0.2 - 2.5mm ² (24-12 AWG)
数字量输出端子 (端子 11, 14)		Digital output (11, 14 terminals)	
输出类型	SSR 30V/~ 50mA 最大	Output type	SSR 30V/~ 50mA max
端子类型	螺丝 (固定)	Type of terminal	Screw (fixed)
端子数量	2	Number of terminals	2
导体截面积 (最小-最大)	0.2 - 2.5mm ² (24-12 AWG)	Conductor cross section (min - max)	0.2 - 2.5mm ² (24-12 AWG)
以太网端口		Ethernet ports	
连接类型	RJ45	Type of connection	RJ45
速率	10/100 Mb/s	Speed	10/100 Mb/s
无线电特性		Radio characteristics	
4G-LTE (EXCGLB02, EXCGLB03)	LTE-FDD: B1/2/3/4/5/7/8/12/13/18/19/20/25/26/28/66 LTE-TDD: B34/38/39/40/41 WCDMA: B1/2/4/5/6/8/19 GSM: 850/900/1800/1900 MHz	4G-LTE (EXCGLB02, EXCGLB03)	LTE-FDD: B1/2/3/4/5/7/8/12/13/18/19/20/25/26/28/66 LTE-TDD: B34/38/39/40/41 WCDMA: B1/2/4/5/6/8/19 GSM: 850/900/1800/1900 MHz
GPS (EXCGLB02)	GPS/GALILEO/QZSS: 1575.42±1.023 MHz GLONASS: 1597.5-1605.8 MHz 北斗/Compass 1561.098±2.046 MHz 有源天线电源: 3.05V	GPS (EXCGLB02)	GPS/GALILEO/QZSS: 1575.42±1.023 MHz GLONASS: 1597.5-1605.8 MHz BeiDou/Compass 1561.098±2.046 MHz Active antenna supply: 3.05V
Wi-Fi (EXCGLB01)	802.11ac	Wi-Fi (EXCGLB01)	802.11ac
连接端子	SMA 母头 (需带SMA公头的天线)	Connectors	SMA female (antenna with SMA male required)
SIM		SIM	
SIM 插槽	Micro SIM	SIM slot	Micro SIM
系统资源		System resource	
CPU	ARM Cortex A7 + ARM Cortex M4	CPU	ARM Cortex A7 + ARM Cortex M4
操作系统	Yocto	Operating system	Yocto
RAM	2Gb (256MB)	RAM	2Gb (256MB)
大容量存储器	64Gb (8GB)	Mass memory	64Gb (8GB)
环境条件		Ambient conditions	
工作温度	-25...60°C	Operating temperature	-25...60°C
相对湿度	<80% (IEC/EN60068-2-78)	Relative humidity	<80% (IEC/EN60068-2-78)
最大污染度	3	Maximum pollution degree	3
过电压类别	II	Overvoltage category	II
海拔	≤2000m	Altitude	≤2000m
外壳		Housing	
类型	4U模块化外壳, DIN 导轨安装	Version	4U modular housing, DIN rail mount
尺寸(长x高x宽)	72x90x64mm	Dimensions(LxHxW)	72x90x64mm
材料	聚酰胺 RAL7035	Material	Polyamide RAL7035
防护等级	IP40 (前面板), IP20 (端子)	Degree of protection	IP40 (frontal), IP20 (terminals)
重量	0.190kg	Weight	0.190kg
认证与合规		Certifications and compliance	
符合	IEC61010-1 IEC61000-6-2, IEC61000-6-3 ETSI 301489-1 EXCGLB01: ETSI 301489-17 EXCGLB02: ETSI 301489-52, ETSI 301489-19 EXCGLB03: ETSI 301489-52	Comply with standards	IEC61010-1 IEC61000-6-2, IEC61000-6-3 ETSI 301489-1 EXCGLB01: ETSI 301489-17 EXCGLB02: ETSI 301489-52, ETSI 301489-19 EXCGLB03: ETSI 301489-52

附录A: 设备应用场景

APPENDIX A: TABLE OF SCENARIOS FOR THE DEVICES

设备 DEVICES	说明	DESCRIPTION	数据日志 DATA LOG	采样时间 SAMPLING TIME (s)	存储天数 DAYS OF MEMORY
RGK610, RGK700, RGK750, RGK800	自动市电故障	Automatic mains failure	119	300	65
			133	900	400
RGK700SA, RGK800SA	单机	Stand alone	132	300	65
			133	900	400
RGK900	并网	Parallel with mains	119	300	65
			133	900	400
RGK900SA	并机	Genset parallel operation	132	300	65
			133	900	400
DCRL5, DCRL8	无功补偿控制器	PFC	470	300	65
			136	900	400
ATL	自动转换开关控制模块	Automatic transfer switch	139	300	65
DCRG8, DCRG8F, DCRG8IND	无功补偿控制器	PFC	136	900	400
			3495	300	65
DMG, DME, PMVF	常规	Basic	568	60	10
			569	300	35
			571	86400	1900
			570	900	400
DMG, PMVF	常规 + EXP/EXM	Basic + EXP/EXM	568	60	10
			569	300	35
			574	86400	1900
			572	60	5
			573	900	400
			570	900	400
			571	86400	1900
DMG	常规 + 谐波	Basic + Harmonics	568	60	10
			569	300	35
			570	900	400
			571	86400	1900
			577	60	10
DMG	常规 + EXP/EXM + 谐波	Basic + EXP/EXM + Harmonics	568	60	10
			569	300	35
			570	900	400
			574	86400	1900
			577	60	10
			571	86400	1900
			572	60	5
			573	900	400
DMG, DME	一般5秒采样时间	Generic 5s sampling time	680	5	2
DMG, DME	电流5秒采样时间	Current 5s sampling time	681	5	2
DMG	谐波5秒采样时间	Harmonic 5s sampling time	682	5	2
DMG, DME	电能5秒采样时间	Energy 30s sampling	4827	30	100
DMG, DME	常规 (LEED)	Basic (LEED)	2137	900	1100
DMG	常规 + 计数器 (LEED)	Basic + Counters (LEED)	2137	900	1100
			2138	900	1100
DME	常规 + 多个单相	Basic + Multi-1-ph	568	60	10
			569	300	35
			570	900	400
			575	900	400
			571	86400	1900
			576	86400	1900
PMVF	SPI	PI	683	3600	400
DME CD	电能	Energy	578	900	400

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设备 DEVICES	说明	DESCRIPTION	数据日志 DATA LOG	采样时间 SAMPLING TIME (s)	存储天数 DAYS OF MEMORY
			579	86400	1900
DME CD	电能 + EXM	Energy + EXM	1409	900	400
			1410	86400	1900
DME CD	水	Water	2639	900	400
			2641	86400	1900
DME CD	水 + EXM	Water + EXM	2643	900	400
			2644	86400	1900
DME CD	气	Gas	2640	900	400
			2642	86400	1900
DME CD	气 + EXM	Gas + EXM	2645	900	400
			2646	86400	1900
LRD	常规	Basic	580	5	10
			581	5	2
ADXL	常规	Basic	1456	60	2
			1457	900	2
			1458	60	2

附录B: 数据日志中的测量值

APPENDIX B: TABLE OF MEASURES IN THE DATA LOGS

DATA LOG*	数据日志说明	DATA LOG DESCRIPTION	测量值索引* MEASURE INDEX*	测量值说明	MEASURE DESCRIPTION	图表 CHART
119	电气参数	Electrical parameters	M2006	发电机电流 L1	L1 Current GEN	
			M2007	发电机电流 L2	L2 Current GEN	
			M2008	发电机电流 L3	L3 Current GEN	
			M2013	发电机电压 L1-L2	L1-L2 Voltage GEN	
			M2014	发电机电压 L2-L3	L2-L3 Voltage GEN	
			M2015	发电机电压 L3-L1	L3-L1 Voltage GEN	
			M2044	市电等效线电压	Eqv Phase-To-Phase Voltage MAINS	
			M2051	市电等效有功功率	Eqv Active Power - MAINS	•
			M2054	发电机等效有功功率	Eqv Active Power - GEN	•
132	电气参数	Electrical parameters	M2006	发电机电流 L1	L1 Current GEN	
			M2007	发电机电流 L2	L2 Current GEN	
			M2008	发电机电流 L3	L3 Current GEN	
			M2013	发电机电压 L1-L2	L1-L2 Voltage GEN	
			M2014	发电机电压 L2-L3	L2-L3 Voltage GEN	
			M2015	发电机电压 L3-L1	L3-L1 Voltage GEN	
			M2054	发电机等效有功功率	Eqv Active Power - GEN	•
133	发动机	Engine	M2016	电池电压	Battery voltage	
			M2083	总工作时数	Total working hours	
			M2087	维护时间 1	Maintenance time 1	
			M2088	维护时间 2	Maintenance time 2	
			M2089	维护时间 3	Maintenance time 3	
			M2090	租赁时间	Rent rime	
			M2091	正常启动百分比	Good crank rate	
			M2093	温度	Temperature	
			M2094	压力	Pressure	
			M2095	燃料	Fuel	
			M2708	公共报警	Global alarm	
3495	测量值	Measures	M11	等效线电压	Eqv Phase-To-Phase Voltage	
			M23	无功功率 L1	L1 Reactive Power	
			M24	无功功率 L2	L2 Reactive Power	
			M25	无功功率 L3	L3 Reactive Power	
			M1532	实际cosΦ	Actual Cos-Phi	
			M2093	温度	Temperature	
			M2119	容性/感性标记	Capacitive/Inductive flag	
			M2659	周平均功率	Weekly average power factor	
			M2890	总无功功率	TOT Reactive Power	•
136	统计	Statistics	M1543	步 1	Step 1	
			M1544	步 2	Step 2	
			M1545	步 3	Step 3	
			M1546	步 4	Step 4	
			M1547	步 5	Step 5	
			M1548	步 6	Step 6	
			M1549	步 7	Step 7	
			M1550	步 8	Step 8	
			M1575	投入次数-步 1	Number of insertions step 1	
			M1576	投入次数-步 2	Number of insertions step 2	
			M1577	投入次数-步 3	Number of insertions step 3	
			M1578	投入次数-步 4	Number of insertions step 4	
			M1579	投入次数-步 5	Number of insertions step 5	
			M1580	投入次数-步 6	Number of insertions step 6	
			M1581	投入次数-步 7	Number of insertions step 7	
			M1582	投入次数-步 8	Number of insertions step 8	
139	测量值	Measures	M2961	线电压 L1-L2 线路 1	L1-L2 Voltage LINE 1	

DATA LOG*	数据日志说明	DATA LOG DESCRIPTION	测量值索引* MEASURE INDEX*	测量值说明	MEASURE DESCRIPTION	图表 CHART
			M2962	线电压 L2-L3 线路 1	L2-L3 Voltage LINE 1	
			M2963	线电压 L3-L1 线路 1	L3-L1 Voltage LINE 1	
			M2967	线电压 L1-L2 线路 2	L1-L2 Voltage LINE 2	
			M2968	线电压 L2-L3 线路 2	L2-L3 Voltage LINE 2	
			M2969	线电压 L3-L1 线路 2	L3-L1 Voltage LINE 2	
470	测量值	Measures	M11	等效线电压	Eqv Phase-To-Phase Voltage	
			M1532	实际cos Φ	Actual Cos-Phi	
			M1541	还需kvar	deltakvar	•
			M2093	温度	Temperature	
			M2119	容性/感性标记	Capacitive/Inductive flag	
			M2659	周平均功率	Weekly average power factor	
568	测量值 1分钟 - 10 天	Measures 1min - 10 days	M7	电流 L1	L1 Current	
			M8	电流 L2	L2 Current	
			M9	电流 L3	L3 Current	
			M11	等效线电压	Eqv Phase-To-Phase Voltage	
			M13	等效无功功率	Eqv Reactive Power	
			M15	等效功率因数	Eqv Power Factor	
			M400	等效有功功率	Eqv Active Power	•
569	测量值 5分钟 - 1 月	Measures 5min - 1 month	M1	相电压 L1	L1 Phase Voltage	
			M2	相电压 L2	L2 Phase Voltage	
			M3	相电压 L3	L3 Phase Voltage	
			M7	电流 L1	L1 Current	•
			M8	电流 L2	L2 Current	•
			M9	电流 L3	L3 Current	•
			M13	等效无功功率	Eqv Reactive Power	•
			M15	等效功率因数	Eqv Power Factor	
			M20	有功功率 L1	L1 Active Power	
			M21	有功功率 L2	L2 Active Power	
			M22	有功功率 L3	L3 Active Power	
			M23	无功功率 L1	L1 Reactive Power	
			M24	无功功率 L2	L2 Reactive Power	
			M25	无功功率 L3	L3 Reactive Power	
			M29	L1功率因数	L1 Power Factor	
			M30	L2功率因数	L2 Power Factor	
			M31	L3功率因数	L3 Power Factor	
			M101	L1电流THD	THD L1 Current	
			M102	L2电流THD	THD L2 Current	
			M103	L3电流THD	THD L3 Current	
			M400	等效有功功率	Eqv Active Power	•
570	测量值 15分钟 - 1 年	Measures 15min - 1 year	M17	反向有功电能	Active Energy - Export	•
			M18	正向无功电能	Reactive Energy - Import	•
			M19	反向无功电能	Reactive Energy - Export	•
			M39	分计小时计数器	Partial hour counter	
			M300	正向有功电能	Active Energy - Import	•
			M3120	分计小时计数器 1	Partial hour counter 1	
571	测量值 24小时 - 5 年	Measures 24h - 5 years	M17	反向有功电能	Active Energy - Export	
			M18	正向无功电能	Reactive Energy - Import	
			M19	反向无功电能	Reactive Energy - Export	
			M39	分计小时计数器	Partial hour counter	
			M300	正向有功电能	Active Energy - Import	
			M3120	分计小时计数器 1	Partial hour counter 1	
572	EXP/EXM - 1分钟 - 5 天	EXP/EXM - 1min - 5 days	M401	输入 1	Input 1	•
			M402	输入 2	Input 2	•
			M403	输入 3	Input 3	•
			M404	输入 4	Input 4	•

DATA LOG*	数据日志说明	DATA LOG DESCRIPTION	测量值索引* MEASURE INDEX*	测量值说明	MEASURE DESCRIPTION	图表 CHART
			M411	输出 1	Output 1	•
			M412	输出 2	Output 2	•
			M413	输出 3	Output 3	•
			M414	输出 4	Output 4	•
			M911	模拟量输入 1	Analog Input 1	•
			M912	模拟量输入 2	Analog Input 2	•
			M913	模拟量输入 3	Analog Input 3	
			M914	模拟量输入 4	Analog Input 4	
			M915	模拟量输入 5	Analog Input 5	
			M916	模拟量输入 6	Analog Input 6	
573	EXP/EXM - 15分钟 - 1 年	EXP/EXM - 15min - 1 year	M911	模拟量输入 1	Analog Input 1	•
			M912	模拟量输入 2	Analog Input 2	•
			M913	模拟量输入 3	Analog Input 3	
			M914	模拟量输入 4	Analog Input 4	
			M915	模拟量输入 5	Analog Input 5	
			M916	模拟量输入 6	Analog Input 6	
			M2865	计数器 1	Counter 1	
			M2866	计数器 2	Counter 2	
			M2867	计数器 3	Counter 3	
			M2868	计数器 4	Counter 4	
574	EXP/EXM - 24小时 - 5 年	EXP/EXM - 24h - 5 years	M911	模拟量输入 1	Analog Input 1	•
			M912	模拟量输入 2	Analog Input 2	•
			M913	模拟量输入 3	Analog Input 3	
			M914	模拟量输入 4	Analog Input 4	
			M915	模拟量输入 5	Analog Input 5	
			M916	模拟量输入 6	Analog Input 6	
575	测量值 15分钟 - 1 年	Measures 15min - 1 year	M901	正向有功电能 L1	L1 Active Energy - Import	•
			M906	正向有功电能 L2	L2 Active Energy - Import	•
			M921	正向有功电能 L3	L3 Active Energy - Import	•
			M3120	分计小时计数器 1	Partial hour counter 1	•
			M3121	分计小时计数器 2	Partial hour counter 2	•
			M3122	分计小时计数器 3	Partial hour counter 3	•
576	测量值 24小时 - 5 年	Measures 24h - 5 years	M901	正向有功电能 L1	L1 Active Energy - Import	
			M906	正向有功电能 L2	L2 Active Energy - Import	
			M921	正向有功电能 L3	L3 Active Energy - Import	
			M3120	分计小时计数器 1	Partial hour counter 1	
			M3121	分计小时计数器 2	Partial hour counter 2	
			M3122	分计小时计数器 3	Partial hour counter 3	
577	谐波 - 1分钟 - 10 天	Harmonics 1min - 10 days	M211	02 谐波电流 L1	02 Harmonic L1 Current	
			M212	02 谐波电流 L2	02 Harmonic L2 Current	
			M213	02 谐波电流 L3	02 Harmonic L3 Current	
			M214	03 谐波电流 L1	03 Harmonic L1 Current	
			M215	03 谐波电流 L2	03 Harmonic L2 Current	
			M216	03 谐波电流 L3	03 Harmonic L3 Current	
			M217	04 谐波电流 L1	04 Harmonic L1 Current	
			M218	04 谐波电流 L2	04 Harmonic L2 Current	
			M219	04 谐波电流 L3	04 Harmonic L3 Current	
			M220	05 谐波电流 L1	05 Harmonic L1 Current	
			M221	05 谐波电流 L2	05 Harmonic L2 Current	
			M222	05 谐波电流 L3	05 Harmonic L3 Current	
			M223	06 谐波电流 L1	06 Harmonic L1 Current	
			M224	06 谐波电流 L2	06 Harmonic L2 Current	
			M225	06 谐波电流 L3	06 Harmonic L3 Current	
			M226	07 谐波电流 L1	07 Harmonic L1 Current	
			M227	07 谐波电流 L2	07 Harmonic L2 Current	

DATA LOG*	数据日志说明	DATA LOG DESCRIPTION	测量值索引* MEASURE INDEX*	测量值说明	MEASURE DESCRIPTION	图表 CHART
			M228	07 谐波电流 L3	07 Harmonic L3 Current	
			M229	08 谐波电流 L1	08 Harmonic L1 Current	
			M230	08 谐波电流 L2	08 Harmonic L2 Current	
			M231	08 谐波电流 L3	08 Harmonic L3 Current	
			M232	09 谐波电流 L1	09 Harmonic L1 Current	
			M233	09 谐波电流 L2	09 Harmonic L2 Current	
			M234	09 谐波电流 L3	09 Harmonic L3 Current	
			M235	10 谐波电流 L1	10 Harmonic L1 Current	
			M236	10 谐波电流 L2	10 Harmonic L2 Current	
			M237	10 谐波电流 L3	10 Harmonic L3 Current	
			M238	11 谐波电流 L1	11 Harmonic L1 Current	
			M239	11 谐波电流 L2	11 Harmonic L2 Current	
			M240	11 谐波电流 L3	11 Harmonic L3 Current	
			M241	12 谐波电流 L1	12 Harmonic L1 Current	
			M242	12 谐波电流 L2	12 Harmonic L2 Current	
			M243	12 谐波电流 L3	12 Harmonic L3 Current	
			M244	13 谐波电流 L1	13 Harmonic L1 Current	
			M245	13 谐波电流 L2	13 Harmonic L2 Current	
			M246	13 谐波电流 L3	13 Harmonic L3 Current	
			M247	14 谐波电流 L1	14 Harmonic L1 Current	
			M248	14 谐波电流 L2	14 Harmonic L2 Current	
			M249	14 谐波电流 L3	14 Harmonic L3 Current	
			M250	15 谐波电流 L1	15 Harmonic L1 Current	
			M251	15 谐波电流 L2	15 Harmonic L2 Current	
			M252	15 谐波电流 L3	15 Harmonic L3 Current	
578	测量值 15分钟 - 1 年 - 电能	Measures 15min - 1 year - energy	M1001	计数器 01	Counters 01	●
			M1002	计数器 02	Counters 02	●
			M1003	计数器 03	Counters 03	●
			M1004	计数器 04	Counters 04	●
			M1005	计数器 05	Counters 05	●
			M1006	计数器 06	Counters 06	●
			M1007	计数器 07	Counters 07	●
			M1008	计数器 08	Counters 08	●
579	测量值 24小时 - 5 年 - 电能	Measures 24h - 5 years - energy	M1001	计数器 01	Counters 01	
			M1002	计数器 02	Counters 02	
			M1003	计数器 03	Counters 03	
			M1004	计数器 04	Counters 04	
			M1005	计数器 05	Counters 05	
			M1006	计数器 06	Counters 06	
			M1007	计数器 07	Counters 07	
			M1008	计数器 08	Counters 08	
580	I/O - 5秒 - 10 天	I/O - 5s - 10 days	M1701	数据寄存器21 2位小数	Data register 21 2 dec	
			M1702	数据寄存器22 2位小数	Data register 22 2 dec	
			M2374	PLC输入 01	PLC input 01	
			M2375	PLC输入 02	PLC input 02	
			M2376	PLC输入 03	PLC input 03	
			M2377	PLC输入 04	PLC input 04	
			M2378	PLC输入 05	PLC input 05	
			M2379	PLC输入 06	PLC input 06	
			M2380	PLC输入 07	PLC input 07	
			M2381	PLC输入 08	PLC input 08	
			M2410	PLC输出 01	PLC output 01	
			M2411	PLC输出 02	PLC output 02	
			M2412	PLC输出 03	PLC output 03	
			M2413	PLC输出 04	PLC output 04	

DATA LOG*	数据日志说明	DATA LOG DESCRIPTION	测量值索引* MEASURE INDEX*	测量值说明	MEASURE DESCRIPTION	图表 CHART
			M2414	PLC输出 05	PLC output 05	
			M2415	PLC输出 06	PLC output 06	
			M2416	PLC输出 07	PLC output 07	
			M2417	PLC输出 08	PLC output 08	
581	I/O - 5秒 - 2 天	I/O - 5s - 2 days	M1701	数据寄存器21 2位小数	Data register 21 2 dec	
			M1702	数据寄存器22 2位小数	Data register 22 2 dec	
			M2374	PLC输入 01	PLC input 01	
			M2375	PLC输入 02	PLC input 02	
			M2376	PLC输入 03	PLC input 03	
			M2377	PLC输入 04	PLC input 04	
			M2378	PLC输入 05	PLC input 05	
			M2379	PLC输入 06	PLC input 06	
			M2380	PLC输入 07	PLC input 07	
			M2381	PLC输入 08	PLC input 08	
			M2410	PLC输出 01	PLC output 01	
			M2411	PLC输出 02	PLC output 02	
			M2412	PLC输出 03	PLC output 03	
			M2413	PLC输出 04	PLC output 04	
			M2414	PLC输出 05	PLC output 05	
			M2415	PLC输出 06	PLC output 06	
			M2416	PLC输出 07	PLC output 07	
			M2417	PLC输出 08	PLC output 08	
680	一般5秒采样时间	Generic 5s sampling time	M1	相电压 L1	L1 Phase Voltage	
			M2	相电压 L2	L2 Phase Voltage	
			M3	相电压 L3	L3 Phase Voltage	
			M5	线电压 L1-L2	L1-L2 Voltage	
			M6	线电压 L2-L3	L2-L3 Voltage	
			M7	电流 L1	L1 Current	
			M8	电流 L2	L2 Current	
			M9	电流 L3	L3 Current	
			M10	线电压 L3-L1	L3-L1 Voltage	
			M20	有功功率 L1	L1 Active Power	
			M21	有功功率 L2	L2 Active Power	
			M22	有功功率 L3	L3 Active Power	
			M23	无功功率 L1	L1 Reactive Power	
			M24	无功功率 L2	L2 Reactive Power	
			M25	无功功率 L3	L3 Reactive Power	
681	电流5秒采样时间	Current 5s sampling time	M7	电流 L1	L1 Current	
			M8	电流 L2	L2 Current	
			M9	电流 L3	L3 Current	
			M49	电流 N	N Current	
			M101	L1电流THD	THD L1 Current	
			M102	L2电流THD	THD L2 Current	
			M103	L3电流THD	THD L3 Current	
			M303	电流不平衡	Current Unbalance	
682	谐波5秒采样时间	Harmonic 5s sampling time	M120	05 谐波电压 L1	05 Harmonic L1 Voltage	
			M121	05 谐波电压 L2	05 Harmonic L2 Voltage	
			M122	05 谐波电压 L3	05 Harmonic L3 Voltage	
			M126	07 谐波电压 L1	07 Harmonic L1 Voltage	
			M127	07 谐波电压 L2	07 Harmonic L2 Voltage	
			M128	07 谐波电压 L3	07 Harmonic L3 Voltage	
			M138	11 谐波电压 L1	11 Harmonic L1 Voltage	
			M139	11 谐波电压 L2	11 Harmonic L2 Voltage	
			M140	11 谐波电压 L3	11 Harmonic L3 Voltage	
			M144	13 谐波电压 L1	13 Harmonic L1 Voltage	

DATA LOG*	数据日志说明	DATA LOG DESCRIPTION	测量值索引* MEASURE INDEX*	测量值说明	MEASURE DESCRIPTION	图表 CHART
			M145	13 谐波电压 L2	13 Harmonic L2 Voltage	
			M146	13 谐波电压 L3	13 Harmonic L3 Voltage	
			M220	05 谐波电流 L1	05 Harmonic L1 Current	
			M221	05 谐波电流 L2	05 Harmonic L2 Current	
			M222	05 谐波电流 L3	05 Harmonic L3 Current	
			M226	07 谐波电流 L1	07 Harmonic L1 Current	
			M227	07 谐波电流 L2	07 Harmonic L2 Current	
			M228	07 谐波电流 L3	07 Harmonic L3 Current	
			M238	11 谐波电流 L1	11 Harmonic L1 Current	
			M239	11 谐波电流 L2	11 Harmonic L2 Current	
			M240	11 谐波电流 L3	11 Harmonic L3 Current	
			M244	13 谐波电流 L1	13 Harmonic L1 Current	
			M245	13 谐波电流 L2	13 Harmonic L2 Current	
			M246	13 谐波电流 L3	13 Harmonic L3 Current	
683	SPI	PI	M5	电压 L1-L2	L1-L2 Voltage	
			M6	电压 L2-L3	L2-L3 Voltage	
			M10	电压 L3-L1	L3-L1 Voltage	
			M35	频率	Frequency	
			M401	输入 1	Input 1	
			M402	输入 2	Input 2	
			M403	输入 3	Input 3	
			M404	输入 4	Input 4	
			M411	输出 1	Output 1	
			M412	输出 2	Output 2	
			M420	OR 报警	OR alarm	
			M1207	电压 L1L2 过高	High Voltage L1L2	
			M1208	电压 L2L3 过高	High Voltage L2L3	
			M1209	电压 L3L1 过高	High Voltage L3L1	
			M1225	频率过高	High Frequency	
			M1307	电压 L1L2 过低	Low Voltage L1L2	
			M1308	电压 L2L3 过低	Low Voltage L2L3	
			M1309	电压 L3L1 过低	Low Voltage L3L1	
			M1325	频率过低	Low Frequency	
			M2495	低电压 VL1-L2	Mobile mean VL1-L2	
			M2496	低电压 VL2-L3	Mobile mean VL2-L3	
			M2497	低电压 VL3-L1	Mobile mean VL3-L1	
1409	测量值 15分钟 - 1 年 - 电能	Measures 15min - 1 year - energy	M1001	计数器 01	Counters 01	•
			M1002	计数器 02	Counters 02	•
			M1003	计数器 03	Counters 03	•
			M1004	计数器 04	Counters 04	•
			M1005	计数器 05	Counters 05	•
			M1006	计数器 06	Counters 06	•
			M1007	计数器 07	Counters 07	•
			M1008	计数器 08	Counters 08	•
			M1009	计数器 09	Counters 09	•
			M1010	计数器 10	Counters 10	•
			M1011	计数器 11	Counters 11	•
			M1012	计数器 12	Counters 12	•
			M1013	计数器 13	Counters 13	•
			M1014	计数器 14	Counters 14	•
			M1015	计数器 15	Counters 15	•
			M1016	计数器 16	Counters 16	•
1410	测量值 24小时 - 5 年 - 电能	Measures 24h - 5 years - energy	M1001	计数器 01	Counters 01	
			M1002	计数器 02	Counters 02	
			M1003	计数器 03	Counters 03	

DATA LOG*	数据日志说明	DATA LOG DESCRIPTION	测量值索引* MEASURE INDEX*	测量值说明	MEASURE DESCRIPTION	图表 CHART
			M1004	计数器 04	Counters 04	
			M1005	计数器 05	Counters 05	
			M1006	计数器 06	Counters 06	
			M1007	计数器 07	Counters 07	
			M1008	计数器 08	Counters 08	
			M1009	计数器 09	Counters 09	
			M1010	计数器 10	Counters 10	
			M1011	计数器 11	Counters 11	
			M1012	计数器 12	Counters 12	
			M1013	计数器 13	Counters 13	
			M1014	计数器 14	Counters 14	
			M1015	计数器 15	Counters 15	
			M1016	计数器 16	Counters 16	
1456	测量值 1分钟 (ADXL)	Measures 1m (ADXL)	M7	电流 L1	L1 Current	•
			M8	电流 L2	L2 Current	•
			M9	电流 L3	L3 Current	•
			M10	电压 L3-L1	L3-L1 Voltage	
			M15	等效功率因数	Eqv Power Factor	
			M35	频率	Frequency	
			M2889	总有功功率	TOT Active Power	•
			M3316	转矩	Torque	•
1457	测量值 15分钟 (ADXL)	Measures 15m (ADXL)	M2083	总工作时数	Total working hours	
			M2093	温度	Temperature	
			M3317	温度状态	Thermal status	
			M3320	有功电能	Active Energy	
1458	报警 (ADXL)	Alarms (ADXL)	M3490	A01 无电压	A01 NO POWER LINE	
			M3491	A02 缺相	A02 PHASE LOSS	
			M3492	A03 相序错误	A03 WRONG PHASE SEQUENCE	
			M3493	A04 频率超限	A04 FREQUENCY OUT LIMITS	
			M3494	A05 辅助电源故障	A05 AUX POWER FAILURE	
			M3495	A06 电流不对称	A06 CURRENT ASYMMETRY	
			M3496	A07 过流跳闸	A07 OVERCURRENT TRIP	
			M3497	A08 电机堵转	A08 LOCKED ROTOR	
			M3498	A09 电机负载过低	A09 MOTOR LOAD TOO LOW	
			M3499	A10 启动时间过长	A10 STARTING TOO LONG	
			M3500	A11 旁路继电器故障	A11 BYPASS RELAY FAILURE	
			M3501	A12 电机超温报警	A12 MOT. THERMAL WARNING	
			M3502	A13 启动器超温报警	A13 STARTER TH. WARNING	
			M3503	A14 电机超温跳闸	A14 MOTOR THERMAL TRIP	
			M3504	A15 启动器超温跳闸	A15 STARTER THERMAL TRIP	
			M3505	A16 L1-T1相短路	A16 L1-T1 PHASE SHORTED	
			M3506	A17 L3-T3相短路	A17 L3-T3 PHASE SHORTED	
			M3507	A18 温度传感器故障	A18 TEMP. SENSOR FAULT	
			M3508	A19 线路电压过低	A19 LINE VOLTAGE TOO LOW	
			M3509	A20 线路电压过高	A20 LINE VOLTAGE TOO HIGH	
			M3510	A21 电机电流过低	A21 MOTOR CURRENT TOO LOW	
			M3511	A22 维护需求	A22 MAINTENANCE REQUEST	
			M3512	A23 冷却风机故障	A23 COOLING FAN FAILURE	
			M3513	A24 冷却风机闭锁	A24 COOLING FAN LOCKED	
			M3514	A25 系统错误	A25 SYSTEM ERROR	
2137	测量值 15分钟 (LEED)	Measures 15m (LEED)	M4	等效相电压	Eqv Phase Voltage	
			M15	等效功率因数	Eqv Power Factor	
			M300	正向有功电能	Active Energy - Import	•
			M400	等效有功功率	Eqv Active Power	
2138	计数器 15分钟 (LEED)	Counters 15m (LEED)	M1001	计数器 01	Counters 01	

DATA LOG*	数据日志说明	DATA LOG DESCRIPTION	测量值索引* MEASURE INDEX*	测量值说明	MEASURE DESCRIPTION	图表 CHART
			M1002	计数器 02	Counters 02	
			M1003	计数器 03	Counters 03	
			M1004	计数器 04	Counters 04	
2639	测量值 15分钟 - 1 年 - 水	Measures 15min - 1 year - water	M1001	计数器 01	Counters 01	●
			M1002	计数器 02	Counters 02	●
			M1003	计数器 03	Counters 03	●
			M1004	计数器 04	Counters 04	●
			M1005	计数器 05	Counters 05	●
			M1006	计数器 06	Counters 06	●
			M1007	计数器 07	Counters 07	●
			M1008	计数器 08	Counters 08	●
2640	测量值 24小时 - 5 年 - 气	Measures 24h - 5 years - gas	M1001	计数器 01	Counters 01	
			M1002	计数器 02	Counters 02	
			M1003	计数器 03	Counters 03	
			M1004	计数器 04	Counters 04	
			M1005	计数器 05	Counters 05	
			M1006	计数器 06	Counters 06	
			M1007	计数器 07	Counters 07	
			M1008	计数器 08	Counters 08	
2641	测量值 15分钟 - 1 年 - 水	Measures 15min - 1 year - water	M1001	计数器 01	Counters 01	●
			M1002	计数器 02	Counters 02	●
			M1003	计数器 03	Counters 03	●
			M1004	计数器 04	Counters 04	●
			M1005	计数器 05	Counters 05	●
			M1006	计数器 06	Counters 06	●
			M1007	计数器 07	Counters 07	●
			M1008	计数器 08	Counters 08	●
2642	测量值 24小时 - 5 年 - 气	Measures 24h - 5 years - gas	M1001	计数器 01	Counters 01	
			M1002	计数器 02	Counters 02	
			M1003	计数器 03	Counters 03	
			M1004	计数器 04	Counters 04	
			M1005	计数器 05	Counters 05	
			M1006	计数器 06	Counters 06	
			M1007	计数器 07	Counters 07	
			M1008	计数器 08	Counters 08	
2643	测量值 15分钟 - 1 年 - 水	Measures 15min - 1 year - water	M1001	计数器 01	Counters 01	●
			M1002	计数器 02	Counters 02	●
			M1003	计数器 03	Counters 03	●
			M1004	计数器 04	Counters 04	●
			M1005	计数器 05	Counters 05	●
			M1006	计数器 06	Counters 06	●
			M1007	计数器 07	Counters 07	●
			M1008	计数器 08	Counters 08	●
			M1009	计数器 09	Counters 09	●
			M1010	计数器 10	Counters 10	●
			M1011	计数器 11	Counters 11	●
			M1012	计数器 12	Counters 12	●
			M1013	计数器 13	Counters 13	●
			M1014	计数器 14	Counters 14	●
			M1015	计数器 15	Counters 15	●
			M1016	计数器 16	Counters 16	●
2644	测量值 24小时 - 5 年 - 水	Measures 24h - 5 years - water	M1001	计数器 01	Counters 01	
			M1002	计数器 02	Counters 02	
			M1003	计数器 03	Counters 03	
			M1004	计数器 04	Counters 04	

DATA LOG*	数据日志说明	DATA LOG DESCRIPTION	测量值索引* MEASURE INDEX*	测量值说明	MEASURE DESCRIPTION	图表 CHART
			M1005	计数器 05	Counters 05	
			M1006	计数器 06	Counters 06	
			M1007	计数器 07	Counters 07	
			M1008	计数器 08	Counters 08	
			M1009	计数器 09	Counters 09	
			M1010	计数器 10	Counters 10	
			M1011	计数器 11	Counters 11	
			M1012	计数器 12	Counters 12	
			M1013	计数器 13	Counters 13	
			M1014	计数器 14	Counters 14	
			M1015	计数器 15	Counters 15	
			M1016	计数器 16	Counters 16	
2645	测量值 15分钟 - 1 年 - 气	Measures 15min - 1 year - gas	M1001	计数器 01	Counters 01	•
			M1002	计数器 02	Counters 02	•
			M1003	计数器 03	Counters 03	•
			M1004	计数器 04	Counters 04	•
			M1005	计数器 05	Counters 05	•
			M1006	计数器 06	Counters 06	•
			M1007	计数器 07	Counters 07	•
			M1008	计数器 08	Counters 08	•
			M1009	计数器 09	Counters 09	•
			M1010	计数器 10	Counters 10	•
			M1011	计数器 11	Counters 11	•
			M1012	计数器 12	Counters 12	•
			M1013	计数器 13	Counters 13	•
			M1014	计数器 14	Counters 14	•
			M1015	计数器 15	Counters 15	•
			M1016	计数器 16	Counters 16	•
2646	测量值 24小时 - 5 年 - 气	Measures 24h - 5 years - gas	M1001	计数器 01	Counters 01	
			M1002	计数器 02	Counters 02	
			M1003	计数器 03	Counters 03	
			M1004	计数器 04	Counters 04	
			M1005	计数器 05	Counters 05	
			M1006	计数器 06	Counters 06	
			M1007	计数器 07	Counters 07	
			M1008	计数器 08	Counters 08	
			M1009	计数器 09	Counters 09	
			M1010	计数器 10	Counters 10	
			M1011	计数器 11	Counters 11	
			M1012	计数器 12	Counters 12	
			M1013	计数器 13	Counters 13	
			M1014	计数器 14	Counters 14	
			M1015	计数器 15	Counters 15	
			M1016	计数器 16	Counters 16	
4827	电能 - 30秒	Energy - 30s	M300	正向有功电能	Imported active energy	

* 数据日志编号和度量索引是在需要详细说明EXCGLB...发送到远程服务器的XML文件时使用的参考。

* The data log number and the measure index are the references to be used in case of need to elaborate the XML file which EXCGLB... sends to the remote server.