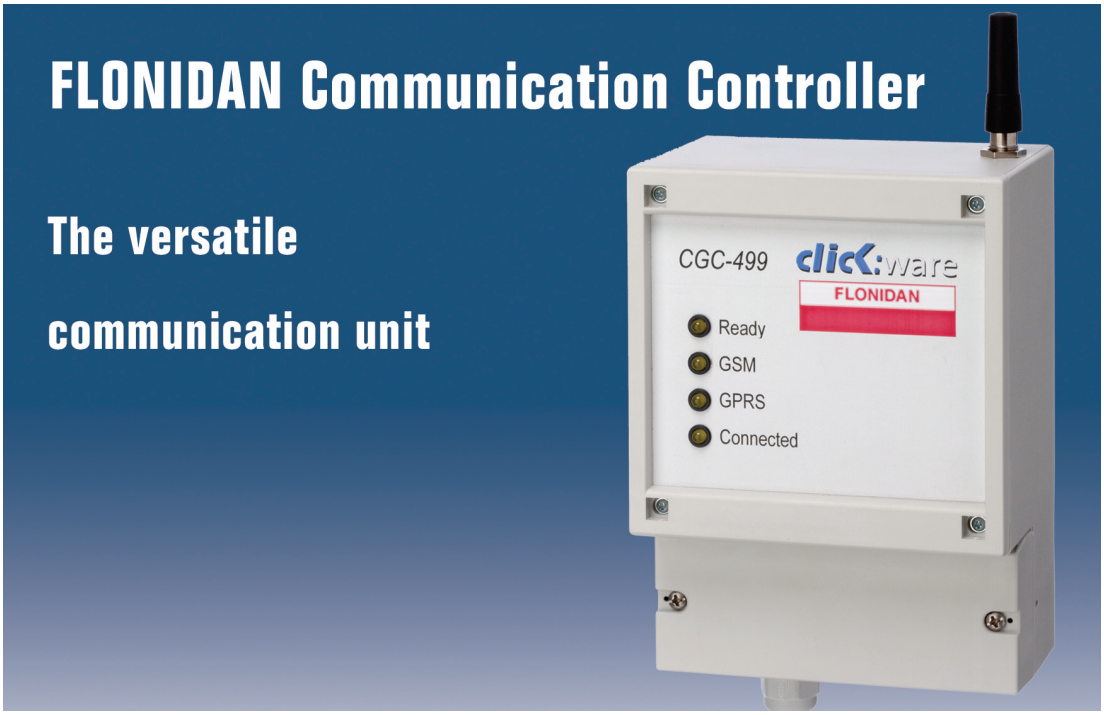
Data Communication Unit FCC-499



Data transmission through GSM or GPRS using the FCC-499

The FCC-499 is a modular GSM / GPRS modem suitable for different types of communication. The modem can be supplied for mains or battery power.

An internal battery provides transparent data transmission through GSM or GPRS in Push Operation. For permanent or intensive modes of communication a power supply is needed.

Due to the liberalisation of the gas market the need grows for more and even smaller remote stations to read the data daily, hourly or even every minute.

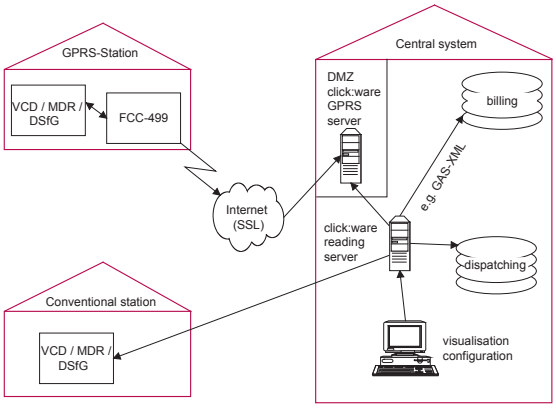
Based on the technical possibilities and tariff structures, GPRS provides an efficient and cost-effective alternative to traditional remote reading solutions.

Between conventional modem connections and GPRS there are some important differences that provide a completely different remote data reading technology.

- The connection with GPRS is always initiated by the remote station.
- GPRS is a packet-switched service as opposed to line-switched GSM and fixed line services.
- After logging on to the GPRS network, the mobile station receives an IP address, and automatically connects to the central system.

Virtual modem

The FCC-499 can replace a traditional modem and operate in conjunction with a remote data reading software (e.g. GDW by click:ware), which you can run in your Central Dispatching system:



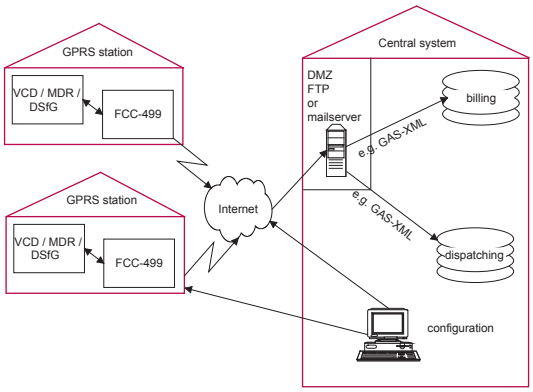
In this case, the device automatically connects to the Central Dispatching System and the Remote Reading Software can then transparently access the remote registration device – just as with conventional modem connections. You do not realise that you actually communicate through GPRS – only from your significantly lower communication costs.

Since the data travels over the Internet, it must be appropriately secured, of course. The communication with the server is secured with SSL (Secure Socket Layer), an accepted procedure which is also used in home banking.

Push operation

In this mode, the FCC-499 is providing its full potential: Centrally operated remote reading software is not even necessary, an FTP or e-mail server fulfils that task – the remote reading software is installed in the FCC.

The FCC controls the communication protocols such as the Uniflo 1200 MODBUS RTU via UniWire or IEC 1107 by means of a communication controller and the protocols of many other data storage devices. It reads the data independently daily, hourly or even every minute from the devices, and provides it on the FTP or mail server in any format such as CSV or XML.

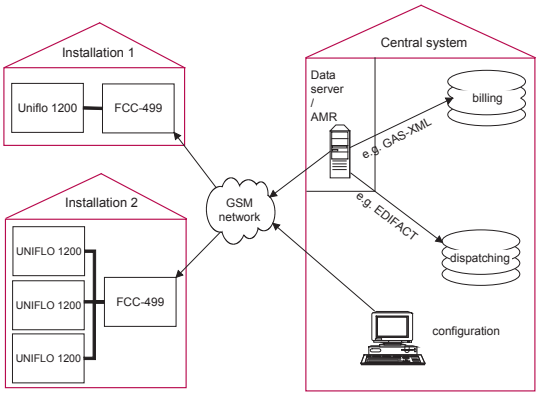


Device-specific drivers for these formats are available in most AMR and Control Systems and only need to be configured accordingly. Remote reading systems with huge modem quantities belong to the past.

Even during the current push operation the FCC-499 accepts calls at any time from a modem to e.g. modifiy the configuration of the Uniflo 1200 or in the FCC-499 itself, or to read data that has not been configured for automatic meter reading.

GSM transparent

The FCC-499 can also be operated in the classic transparent mode. On battery powered operation one or more time frames can be set in which the modem is switched on and logs on to the GSM network.



Simple configuration

The configuration is done via an easy-to-use dialogue application, either directly via the serial port or by remote configuration, when the FCC-499 is already installed on site. The configuration software is included on delivery. A special adapter for the configuration is available.

Interface

The FCC-499 has an interface slot to accommodate various communication interfaces such as RS-232, RS-485, UniWire, encoder NAMUR and TTL level of a Uniflo 1200 controller.

Features

FCC-499: housing suitable for wall installation with external power supply and 5V supply output for the Uniflo 1200.

ATEX

To meet the ATEX directive 94/9/EC a safe connection between the FCC-499 installed outside the hazardous area and the Uniflo in the hazardous area can be achieved by using Zener barriers.