

FTP and MQTT Server Service

LSI Lastem allows its customers to activate a data repository service on web space with access via FTP protocol and a communication service via MQTT protocol through a broker-server.

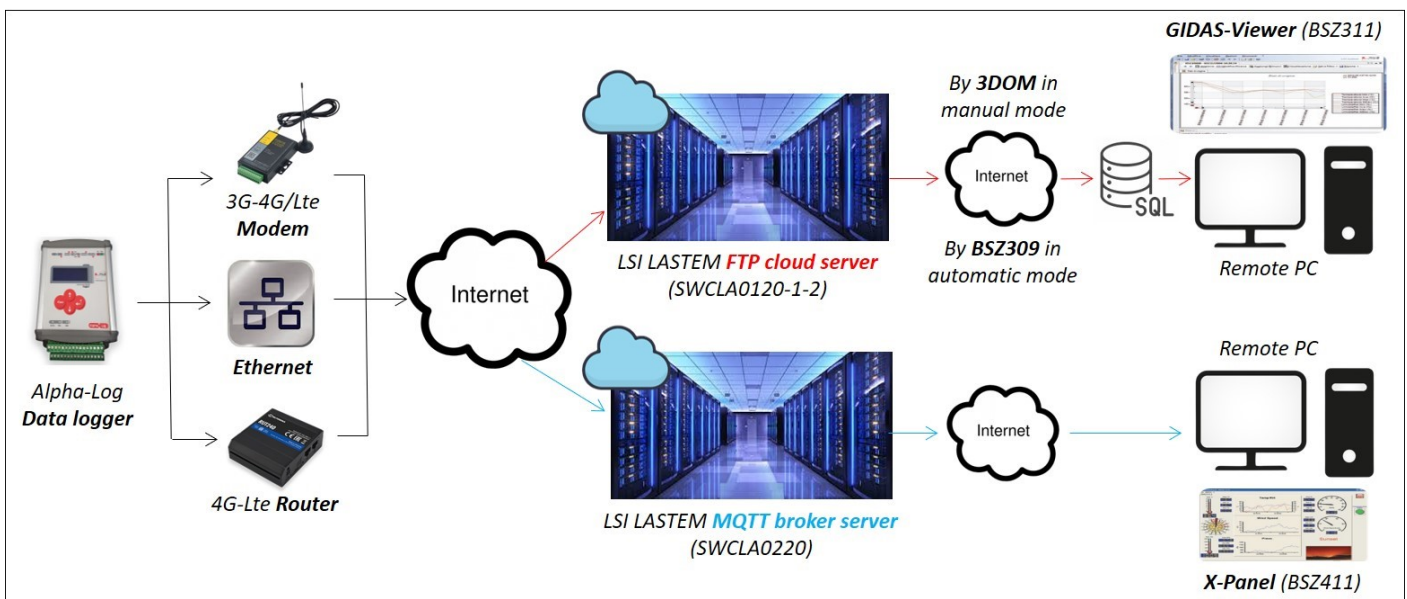
The customer who does not have its own server to address the arrival or transit of data from monitoring stations via FTP protocol or MQTT communication protocol, may request the activation of these two services.

The services are available in the form of an annual subscription. The FTP cloud server service is available with different storage capacities.

- ▶ Server services (FTP and MQTT) for customers without their own servers
- ▶ Reliable and certified cloud servers
- ▶ Annual subscription service with various sizes on FTP servers up to 10 GB

Main features

Communication from data logger to remote PC through server



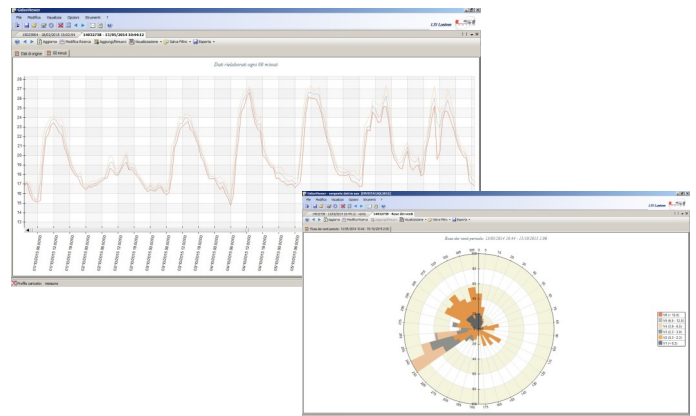
▶ Explanatory diagram of **data communication** between data logger and remote PC via **storage on cloud FTP server** publication on **MQTT broker server**

The Alpha-Log **data logger** can **transmit data** to the FTP cloud server or the MQTT broker server via: 3G-4G/Lte Modem, Ethernet, 4G-Lte Router.

FTP Server

Once stored on the **FTP server**, the data is downloaded to a remote computer through two **download** methods:

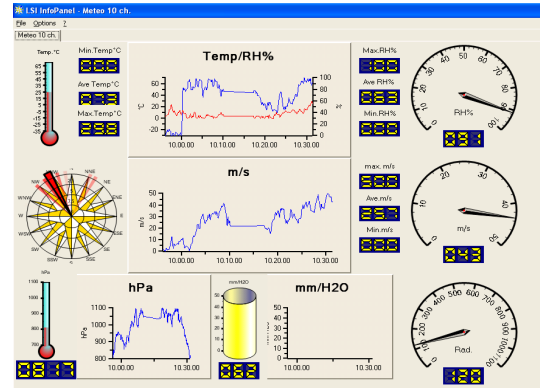
1. **Manual mode:** thanks to the **3DOM** software it is possible to manually download the data
2. **Automatic mode:** through the **Alpha-Log CommNET** software (BSZ309) it is possible to perform automatic data download. In this case, in order to always obtain the latest data available on the server, the remote PC must remain switched on



With both download programs, the data are stored on the remote PC in a SQL-GIDAS database to be managed by LSI LASTEM programs that use this database, such as the **GIDAS-Viewer** program (BSZ311) for data processing and reporting. The GIDAS-Viewer software can be installed on several PCs.

MQTT Broker server

The data published on the **MQTT broker server** can be viewed on a remote PC thanks to the **X-Panel** software (BSZ411), which provides a real-time data visualization dashboard. In the X-Panel program there is a module that allows the client to register the program on the MQTT broker server, in order to save a file with the instant values sent to the broker by the configured Alpha-log data loggers (one or more than one).



Available services

Both services require activation for every **single data logger** connected to the server.

SWCLA0009: FTP/MQTT service activation

The **annual subscription** to the FTP cloud server does not vary according to the number of connected stations, but according to the volume of server space required, different sizes are available, chosen according to the expected volume of data in memory: from 1 to 5 and 10 GB. The FTP service can also be used to save the configurations of the data loggers for their remote updating.

SWCLA0120: 12 Months License FTP service, 1 GB

SWCLA0121: 12 Months License FTP service, 5 GB

SWCLA0122: 12 Months License FTP service, 10 GB

The annual subscription to the MQTT service on broker-server is quoted for **each station**.

SWCLA0220: 12 Months License MQTT service, n.1 Data Logger

Server use rules

The user of the FTP service ensures that the information entered in its space on the server is in its legitimate availability and does not violate laws. The user assumes all **responsibility for the content of the space**, exempting LSI LASTEM from any responsibility and burden of verification and / or control in this regard.

The space on the FTP server is dedicated to the **exclusive reception and saving of data from the monitoring systems** of LSI LASTEM which reserves the right to perform an **automatic cleaning** of the data space in order to remove any element not coming from its measurement systems. The customer must therefore not use the space to store or transfer different files, under penalty of their automatic cancellation.