

LineSupply Fibra

Module for additional power supply of Fibra devices

<p>LineSupply (45 W) Fibra</p> <p>Module for additional power supply with 45 W power¹ and one output Fibra line.</p>	<p>LineSupply (75 W) Fibra</p> <p><i>COMING SOON</i></p> <p>Module for additional power supply with 75 W power² and two output Fibra lines.</p>
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Protecting objects of any size

LineSupply offers versatile wired security system coverage for facilities of any size, whether a renovation or a new project. The device provides power to connected Fibra devices and extends the line length to 2,000 meters. LineSupply enables installer to combine up to 10 modules on a single line, boosting a line length for up to 20 kilometers. This flexibility opens numerous possibilities to effectively cover the factories, farms, cottage communities, or other large-scale facilities.

Key features

<p>Output Fibra line length⁽¹⁾ up to 2,000 m</p>	<p>Splits Fibra line into two lines</p> <p>LineSupply (75 W) Fibra</p>	<p>Additional power supply for the Fibra line</p>	<p>Remote control and configuration</p>
<p>Up to 10 modules on the Fibra line</p>	<p>Protects connected devices from</p> <ul style="list-style-type: none"> • short circuit • overvoltage 	<p>Convenient mounting and cable management</p> <p>when installed into Case⁽³⁾</p>	<p>Up to 2,000 m range of communication with an Ajax hub or a module that extends the Fibra line⁽¹⁾</p>
<p>Informative in-app notifications</p> <p>Office: output line power supply turned on by Alex, LineSupply Fibra in Hall #1</p> <p>Production: device detached from surface, LineSupply Fibra in Workshop #1.</p>	<p>Zero power consumption from the Fibra line</p> <p>The module is powered by 110/230 V~ and a backup battery⁽²⁾</p> <hr/> <p>Backup battery with a capacity of up to 18 Ah⁽²⁾</p>	<p>Compliance</p> <p>Grade 3 (EN 50131) IN PROGRESS</p> <p>PD 6662:2017</p>	<p>Fibra wired connection</p> <p>Two-way communication, TDMA, Encryption, Protection against spoofing, Protection against short circuit</p> <hr/> <p>Two colours</p>

Compatible hubs

- Hub Hybrid (2G)
- Hub Hybrid (4G)

This is the wired device of the **Fibra product line**. Only accredited Ajax Systems partners can sell, install, and administer Fibra products.

Thoughtful design with safety in mind

Working with a power supply module must be safe, so LineSupply Fibra enclosure is designed to insulate every element exposed to current. It also has special rails, allowing the device to be quickly mounted inside a compatible Case without additional holders. Installers can choose two options for positioning the device with a 180-degree rotation. Passive ventilation protects the module from overheating. With two available enclosure colors, combining LineSupply with any Case is easy.

Record Fibra line length

Factory	Shopping center with underground parking lot	School with outbuildings
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Typically, the output device's line can reach 2,000 m⁽¹⁾. With LineSupply, the total Fibra line length can reach 22 km. An installer just needs to use up to 10 modules one after another on a Fibra line. As a result, the wired Ajax system can cover the territory of a factory, power plant, farm, office, or shopping center with underground parking or any other large facility.

- Up to 22 km of the Fibra line length
- Up to 10 modules installed on the line

Flexible security system design

LineSupply (75 W) Fibra splits the line into two and extends each one of them by 2,000 m⁽¹⁾. There is no need to replace wiring if you want to use Ajax instead of an outdated security system that already has splitters. The module can be installed at any point of the Fibra line (following another LineSupply as well).

Even more freedom in security systems design

As an installer, you can use **LineSplit Fibra** when you need more line splits for an object with complicated topologies. The module splits the Fibra line into four lines, extends each one of them by 2,000 m, and brings a new level of flexibility into the installation process.

Discover future-proof hardware

- Prevents overheating
- Connects the module to the built-in Case tamper.
- 45 W version(4) has one output line, 75 W version(5) has two output lines.
- Completely isolates the output lines from the hub power supply.
- Protects against wrong battery poles, short circuit, and overvoltage at the output.
- Help to install the device into Case in one move.
- Informs about module states.
- Informs about connection state of power supply, input and output lines.

Multi-purpose casing

The convenience for PROs is a priority. Ajax products are thought-out to the smallest details and easy to work with. That's why we created Case, a one-stop casing suitable for module-type Fibra devices. Various size options help combine multiple modules, optimize space, and reduce installation expenses. LineSupply is compatible with Case(3) and can be installed in the casing with other devices.

Fibra

Unique wired technology

An Ajax system uses secure two-way communication based on Fibra proprietary protocol. It features encryption and device authentication to prevent sabotage, spoofing, and data theft. Fibra lines are versatile and support connecting different types of devices to one line: sirens, keypads, and detectors with photo verification.

- Up to 2,000 m of wired communication with a hub or a line extension module
- One line for different types of devices
- Photo delivery via Fibra line without interference
- Protection against sabotage and spoofing

Energy efficiency first

- For any Fibra line length
- Zero power consumption from Hub

LineSupply with connected devices consumes no power from the hub. Fibra communication itself requires minimum power consumption and follows the TDMA principle. Each device has a short time frame to exchange data with a hub, and its communication module is inactive the rest of the time. This significantly

reduces power consumption and helps avoid interferences even when multiple devices communicate simultaneously.

Each LineSupply output line is power-independent, making the system even more reliable. The module is powered by 110–230 V~ mains and has a connector for a 12 V= backup battery with a capacity from 7 to 18 A·h.

- Power independence of connected devices from the hub
- TDMA and power-saving modes
- Mains power supply, battery backup

Sabotage resistance

Tamper alarm	Protection against short circuit
LineSupply needs to be installed into Case , which has a built-in tamper. The tamper notifies the security company and users about attempts to open Case or detach it from the surface.	The system instantly detects a short circuit on the line and notifies the security company and the users. And when the problem is fixed, there is no need to replace the fuses: the system will restore operation automatically.
Device authentication against spoofing	Data-rich notifications
The hub checks the device's unique parameters for authentication during each communication session. If any parameter fails the check, the hub ignores device commands.	The monitoring station and users instantly receive notifications on events. The information includes time, device type and name, event type, and location room ⁽⁶⁾ .
Data encryption	Communication failure detection
All data the system stores and transmits is protected by block encryption with a dynamic key. Encryption makes it extremely difficult to connect to the module with the intention of sabotage.	The device regularly exchanges data with the hub. With minimal polling interval settings (3 data packages and 12 seconds), it takes only 36 seconds to identify communication loss and notify the security company and users about the incident. Additionally, the hub is controlled by the Ajax Cloud server, so each element of the system is supervised.

Next-level Fibra line protection

Introducing **LineProtect**, the module to protect an Ajax hub and connected wired devices from sabotage when an intruder causes overvoltage, short circuits, applies 110/230 V~ or uses stun guns.

PRO is king

The myth about wired systems being difficult to install is busted. Ajax minimized an expensive, long, and dusty experience for PROs by developing an ultimate set of tools to make the process easy and flexible, from project design to client support and system maintenance. The module is installed inside Case with a flick of the wrist. Intuitive Ajax apps help quickly make the device a part of the system, and each device can be reconfigured remotely at any moment. No programming required – everything is available out of the box.

Fibra power supply calculator

The online tool provides security engineers with detailed data on devices' power consumption, enabling easy pre-installation assessment of the wired system project. It helps design the project in real time, highlights problem spots, and offers solutions. Upon completion, results can be downloaded as a PDF file.

Installation

The module needs to be installed into **Case**. The installation kit includes all the necessary fasteners. The casing has flexible holders to secure the device with a flick of the wrist. A built-in spirit level and slightly bigger fixing points assist the professional in a perfectly accurate mounting position. Inside, Case has special fasteners and several parts on the sides and back for cable management. Markings for drill positioning and special protectors⁽⁷⁾ help to stop the drill before it hits holders or other components. The top lid of the casing is equipped with anti-falling screws to prevent accidental dropping of installation parts.

- Installation into Case⁽³⁾
- All the necessary fasteners included in the installation kit
- Thought-out cable management

Setup

The device is paired with the hub automatically via Fibra line scanning. This tool is available in the desktop or mobile PRO apps. An installer only needs to name the device and assign it to the room and security group. The device can also be added by scanning the QR code or entering its ID manually.

- Pairing with a hub via automatic line scanning or QR code
- Device identification via triggering or LED indication
- Optimal default settings to cover major requests

Configuration

Intuitive Ajax apps provide remote set-up and testing with all device information from anywhere the Internet is available, on a smartphone or PC. An installer can remotely change the settings and provide services promptly without visiting the object.

- Configuration and testing remotely or on site
- iOS, Android, macOS, and Windows apps
- Accounts for companies and installers

Monitoring

An Ajax system transmits alarms to the **PRO Desktop** monitoring app or any third-party CMS. The security company receives an alarm notification in less than a second. Notifications include all the necessary information: name of the device, time of the event, and the exact room where the device is located. The security company also receives photo or video verification, capturing the reason for the alarm.

- Full addressability of connected devices
- Instant in-app notifications
- Alarm and event monitoring through Ajax PRO Desktop or third-party CMS

1 – When using a UTP cat. 5 twisted pair cable. Other cables may have different values. Fibra power supply calculator

2 – The battery is not included in the complete set.

3 – Case is not included and sold separately.

4 – Output power per line from LineSupply (45 W) Fibra is 30 W. Another 15 W is used to charge the backup battery.

5 – Output power per each of two output lines created by LineSupply (75 W) Fibra is 30 W. Another 15 W is used to charge the backup battery.

6 – The list of transmitted parameters may vary depending on the CMS type and selected communication protocol.

7 – Case D (430) does not have protectors.