BarnMini -05

Barnfind Technologies

BarnMini-05 is our most advanced BarnMini module. It is a compact way to combine serial data RS422/RS485, 4 x GPI and 4 x GPO, controllable via an Ethernet/ SFP port. The unit can serve as an intelligent bridge between many third-party devices, for example transferring an RS422 signal or Tally between two locations. As well it can control an external optical changeover switch (BarnMini-06) in a redundancy setup. Triggers are easily set. BarnStudio, Barnfind's control software, can be used to configure and monitor BarnMini-05.
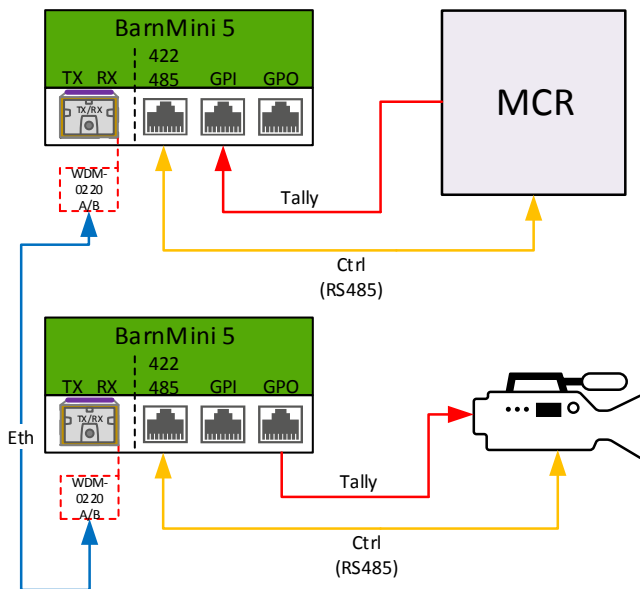
Functionalities

- 4x GPI
- 4X GPO
- RS422/485
- Supports TSL Tally and UMD
- Ping generator

With the introduction of the BarnMini family a few years back, Barnfind has become the "one stop shop" fiber transport solution from the most advanced BarnOne system to the simpler standalone box solutions. We like to say that the BarnMini family is the answer to the expression about the "Swiss army knife". The usage areas for one BarnMini are numerous.

We started out with a few simple BarnMini's, but we soon discovered the need to expand the product range dramatically – and there are many more BarnMini's to come.

Many clients like the BarnMini's as a standalone solution where no control is required. BarnMini solve everything from a simple task to the more comprehensive solutions where the BarnMini's are used in conjunction with BarnOne's to make complete distributed systems in larger facilities....*read more inside*

BarnMini-05:

- Transport GPI/O
- Transport RS422/485
- Use ping function for redundancy switching
- Fully controllable from BarnStudio
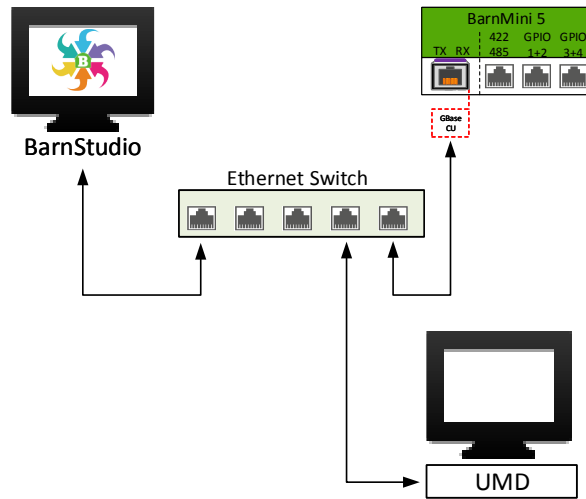- SFP interface
- Supports TSL protocols

BarnMini general information

- You can use any SFP from Barnfind or any other SFP as long as they are MSA compatible.

- Minis are more flexible than most competitors. One Mini can serve serval tasks.

- Multimode to singlemode conversion in one Mini.

- BarnMini Housing in 2,5RU for up to 16 x different BarnMini

- Same PSU in the BarnMini frame as for the BarnOne family.

- All BarnMini modules are operational from 5V to 24V.

- Can be used as a standalone box or in advanced systems with BarnOne or any 3rd party solution.

- BarnMini has the same generous warranty conditions as BarnOne.

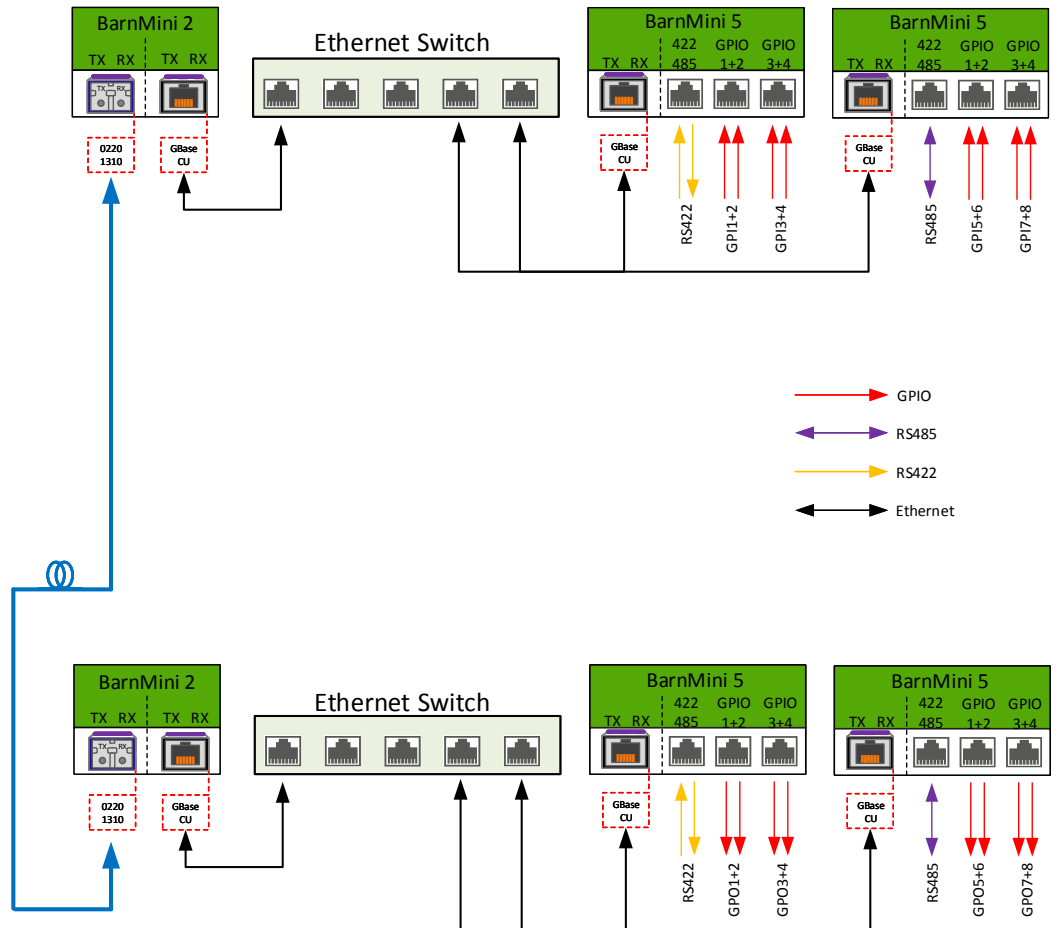- Rock solid mechanics and technology, made for harsh environment.

Technical Specifications

Serial Data Port	Power Supply
• RJ45 connector	• 12-24V DC power supply included
• selectable RS422 or RS485	• redundant power supply available with BTF-Mini-16
GPIO ports	**Physical Size**
• 2x RJ45 connector with 2x GPI and 2x GPO per connector	• 92mm x 98mm x 22mm
• 4x GPI - optocoupled; common floating 5V reference; 240Ω resistor in series; connect to 0V reference to trigger	• 200g
	Model Name
• 4x GPO - Relays; max. 50V AC/DC; max 100mA	• BM-05
SFP port	
• Port for Small Form-Factor Pluggable (SFP), supports MSA-compliant (multi source agreement) transceivers	
• Suitable for optical transceivers (singlemode/multimode), SFP electrical processors (Ethernet)	
• Hot pluggable/swappable	

BarnStudio

BarnMini 5

Ethernet Switch

UMD

Examples

BarnMini 2

Ethernet Switch

BarnMini 5

BarnMini 5

RS422 GPI1+2 GPI3+4

RS485 GPI5+6 GPI7+8

GPIO

RS485

RS422

Ethernet

BarnMini 2

Ethernet Switch

BarnMini 5

BarnMini 5

RS422 GPO1+2 GPO3+4
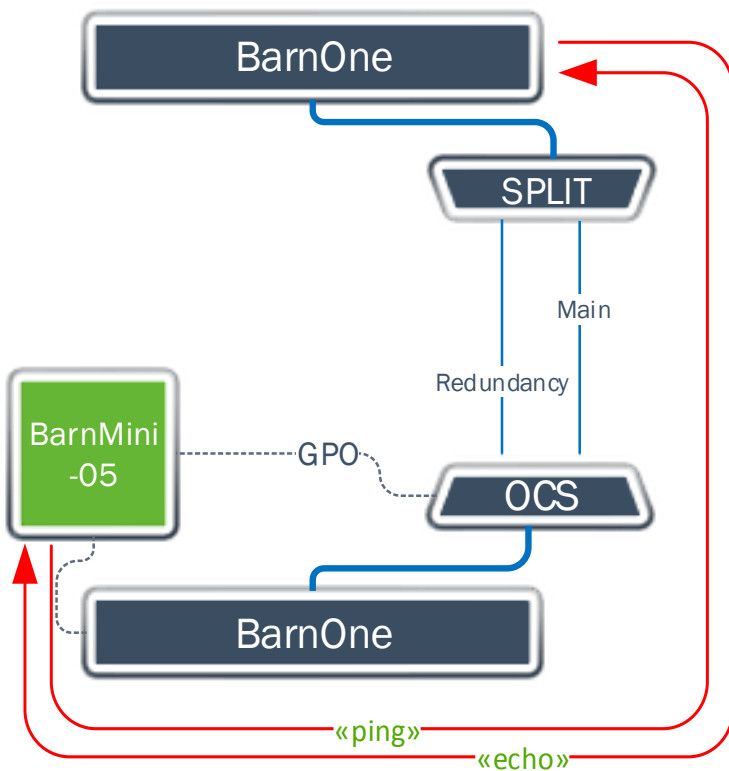
RS485 GPO5+6 GPO7+8

Automatic redundancy switching

When designing a system used in signal transport, redundancy is always a major factor and needs to be considered seriously to avoid lost transmission, even for a second. One of the most fragile part in a fiber transmission system, is the fiber itself. A thin piece of glass that can easily be bent or cut.

BarnMini-05 can be configured to generate ping requests to a selected remote peer, e.g a computer, another BarnMini 05 or a BarnOne frame, and will expect an echo to validate the connection between them. If the requested echo is missing, the BarnMini-05 will activate one or more GPO connection.

In practical use, this can be used to toggle between main and redundant fiber lines.

Use BarnStudio (free software) to access all the great functionalities and configurations in BarnMini-05 and frames in BarnOne family.

A complete and free version of BarnStudio can be downloaded from: https://www.barnfind.no/downloads/