Anybus EtherTAP2: 1G

A passive diagnostics solution that can be used around the clock.

The EtherTAP2 is a monitoring interface that enables the in-depth analysis of PROFINET and EtherNet/IP traffic. Just like its highly popular predecessor, it acts as a bridge between your industrial network and our Osiris diagnostics platform. However, its newly designed housing and improved functionality guarantee the early detection of communication errors and give round-the-clock access to passive diagnostics.

Upgrading the EtherTAP's housing – which is based on the Atlas2 Plus - has turned our handy plug and play solution into an effective permanent monitoring solution. First, it's designed to be permanently installed on a DIN rail. It now fits neatly side-by-side your Atlas2 Plus. Second, it improves heat dissipation in the cabinet, reducing the risk of overheating and boosting efficiency.

Distinctive features

• Passive diagnostics

• Cycle time per device

• Positive and negative message jitter

• Number of dropped packets

• Alarm Triggers

Application example:

• Message recording of the PROFINET and Industrial Ethernet

• Compatible with Anybus Osiris Software for passive diagnostics

• Telegram analysis on bit-level

To make tapping available make sure you have:

• A correct license

• An EtherTAP placed between two devices communicating over PROFINET

• A running measurement

Dimensions

W x D x H (mm):	52 x 130 x 120 (DIN-Rail clip included; plug-able connectors as amounted in installations excluded)
Weight:	465 grams (excluding plug-able connectors, packing material)
DIN-rail:	35 x 7.5 mm (IEC/EN 60715)

Ambient conditions

Operating temperature range	-20^0 to +60^0 Celsius
Storage and shipping temperature	-20^0 to +85° Celsius
Relative air humidity	Max. 98%, non-condensing
Ingress protection	IP 20 (IEC/EN 60529, DIN 40 050)

Power supply

Maximum power use	Max. 3 W
Powered from USB port	Yes Connect power supply POW1 and/or POW2 if the USB power supply is not sufficient. Disconnecting the USB 3.0 cable also interrupts the connected Ethernet cables for 1-2 seconds.

Nominal power supply USB	5 VDC
Current consumption Secondary @5 VDC	Max. 520 mA at 10 Mbps (Full Traffic) Max. 450 mA at 100 Mbps (Full Traffic) Max. 600 mA at 1000 Mbps (Full Traffic)
Nominal power supply POWER 1-2	12 to 24 VDC
Current consumption POWER 1-2 @12 VDC	Max. 220 mA at 10 Mpbs (Full Traffic) Max. 190 mA at 100 Mbps (Full Traffic) Max. 250 mA at 1000 Mbps (Full Traffic)
Reverse polarity protection	Yes
Pluggable power supply connector	Pin - : 0 V Pin +: 12 to 24 VDC Pin SH: Shield
Wire diameter	Max. AWG 14 (max area 2.5 mm^2)

Installation notes:	The device shall be powered with a correct power supply:
	• For North America the power supply shall be listed and meet the requirements for class 2
	• For the rest of the world the power supply shall meet the requirements for limited power sources as defined in IEC/EN 60950-1 cl. 2.5
	Possible power supplies:
	XP-power DNR120-480 series
	Phoenix STEP-PS series
	Traco power TCL series
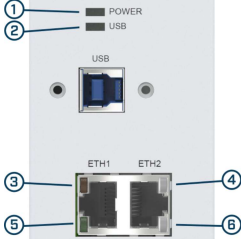
Ethernet

Connector ETH1 and ETH2	RJ-45
Maximum cable length	100 m
Link speed	1 Gbit
Network Link	Galvanically separated
Network Latency	10 Mbps: max. 7600 ± 25 ns 100 Mbps: max. 720 ± 24 ns 1000 Mbps: max. 380 ± 8 ns

USB Ports

Port type	USB3.0; Port type B

LEDs

Power LED (1)	On: Power Ok
USB LED (2)	Off: No USB cable connected On: USB cable and USB power connected Blinking: Constant synchronization between system time and hardware timestamp.
Link/Activity LEDs (3,4)	On: The Ethernet Port is linked Blinking: The port is linked and has RX/TX activity (traffic is passing through).
Speed LEDs (5,6) 	LED5 On: Operating at 100 Mbps. LED6 On: Operating at 10 Mbps. LED5,6 On: Operating at 1000 Mbps. LED5,6 Blinking: EtherTAP is not connected or trying to connect. LED5,6 Alternate Blinking: EtherTAP cannot find a common speed between the connected devices.

System requirements

System type and Operating system	Atlas, Atlas2 Plus; Linux
	PC: Dual Core Processor, 4 GB memory, USB3.0 port; Windows 7/8/10 (32-bit & 64-bit)

Standards and Approvals

CE	EMC Directive 2014/30/EU, class A RoHs Directive 2011/65/EU Emission: CISPR32 Immunity: CISPR35
FCC	47 CFR 15 & ICES-003 (Issue 6), class A

File	Version	Size	Read online

Ordering Information

Order Codes	513-20021A
Included Components	Anybus EtherTAP2: 1G Supplied with manual, drivers, 1 x 1m RJ/45, 1 x 1 USB
Additional Information	Works with EtherTAP: PROFINET Analysis License (101-700204), Wireshark, ClearSight, OptiView, NetSpector, OmniPeak, NetDecoder, Packetyzer, Ethertest.
Warranty	1 year