1. Application:

The metal RACK-Security enclosure is designed for mounting the alarm control panel and the input/output modules in free-standing RACK19" cabinets with depths in the range from 800 to 1000mm. It consists of two elements:

1. **Patch Panel** is used to switch between the YTDY 6x0,5 cable with copper cores and the elastic cable supplying signals and power to the control panel.

2. **Pull out enclosure with a 2U height** – alarm control panel and input and output modules are mounted in this section - with a space for 7Ah battery, transformer, and the ARAW45 fan (transformer and fan are not included)

Both **ARAS800** and **ARAS1000** rails -   selected depending on the depth of a RACK cabinet - constitute the load bearing part of the enclosure (not included). The enclosure is fitted with 3 printed circuit boards (PCB) allowing connection of signal, power and control cables. Each of the boards has 8 pairs of terminals designed to operate at a voltage of 30VDC and a maximum current of 1,5A. In addition, each one is fitted with the 230VAC power board. The enclosure is fitted with 3 tamper switches.

1. Pulling out the enclosure from RACK profiles
2. Enclosure opening
3. Patch Panel opening

Universal holes in the enclosure allow mounting of control panels and expansion modules of the following companies: DSC, PARADOX, RISCO, SATEL, PYRONIX, CROW, TELMOR, ROEL, ROGER, EBS and PULSAR.

Fig.1

2. Mounting of the ARAS800/1000 rail in the RACK 19" cabinet:

Mount cage nuts for M6 screws in the RACK cabinet, as shown in Figure 2 below, and mount the ARAS rails (depending on the depth of a RACK cabinet). Make sure that the rail is correctly mounted horizontally and its length between the front and rear RACK profile is properly adjusted.
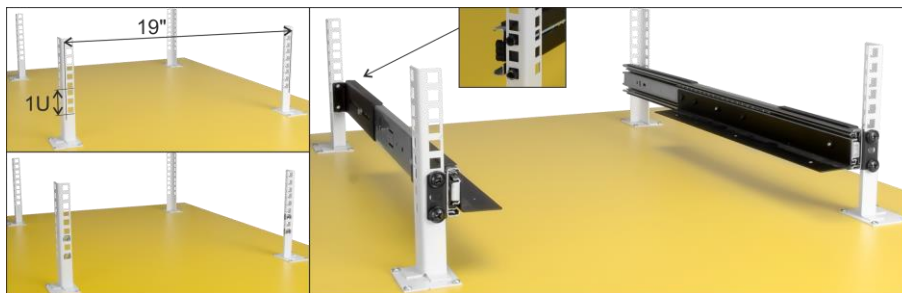

Fig.2

3. Mounting of the ARAD-S2 in the RACK 19" cabinet:

After mounting the ARAS rails in the rear of the RACK 19 ", mount the Patch Panel as shown in Figure 3.

Fig.3

Mount the ARAD-S2 enclosure on fully extended ARAS rails using 6xM4 screws (complete with ARAS rails). Tighten the screws from the inside. Connect the Patch Panel wires as shown in the Fig.4

CAUTION!!! - Pay attention to the correct arrangement of   A / B / C / D / E / and F connectors in the appropriate sockets described on PCB Signal Boards.
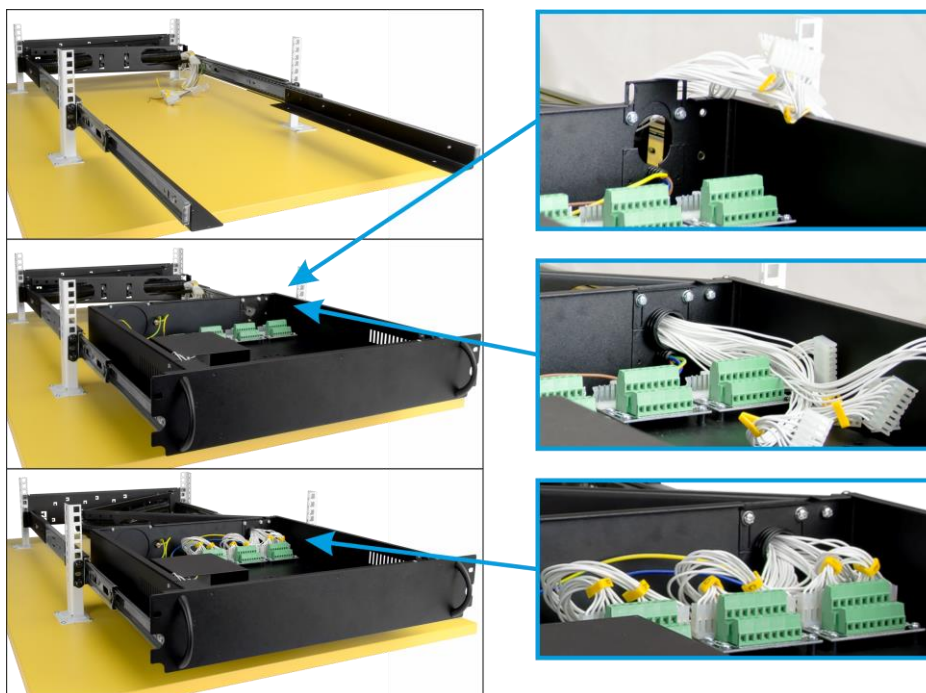

Fig.4

Two protective tubes with a length of 0,5 m. are used for routing of power cords and signal cables from the installation to the Patch Panel. **Protective tube for power cord** – internal/external diameter ø6/ø10 (available as accessory – MM064). **Protective tube for signal cables** – 24 YTDY 6x0.5 wires, internal/external diameter ø21/ø29 (available as accessory – MM020). The routing of protective tubes in the Patch Panel and its sealing is shown in the Fig. 5.
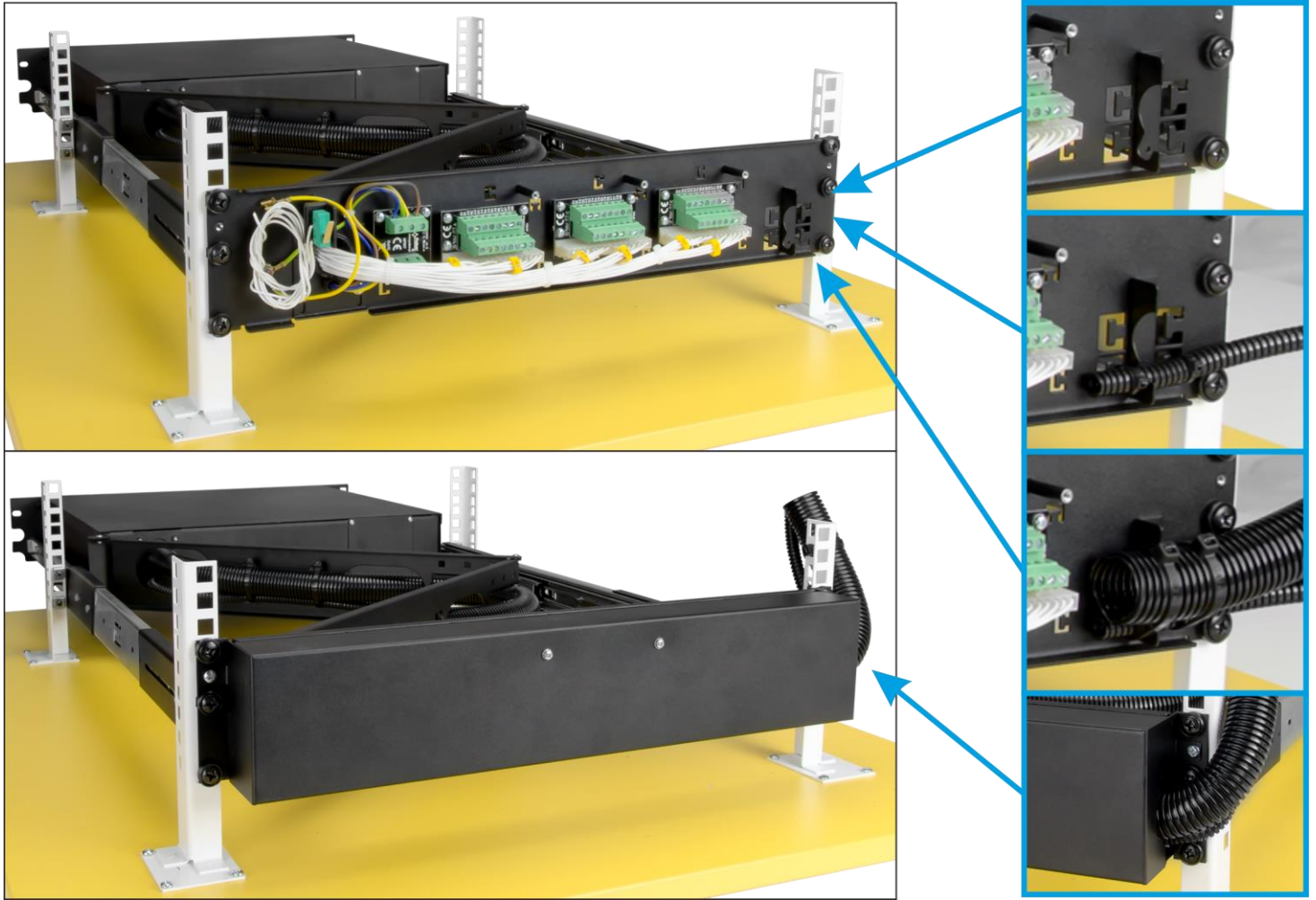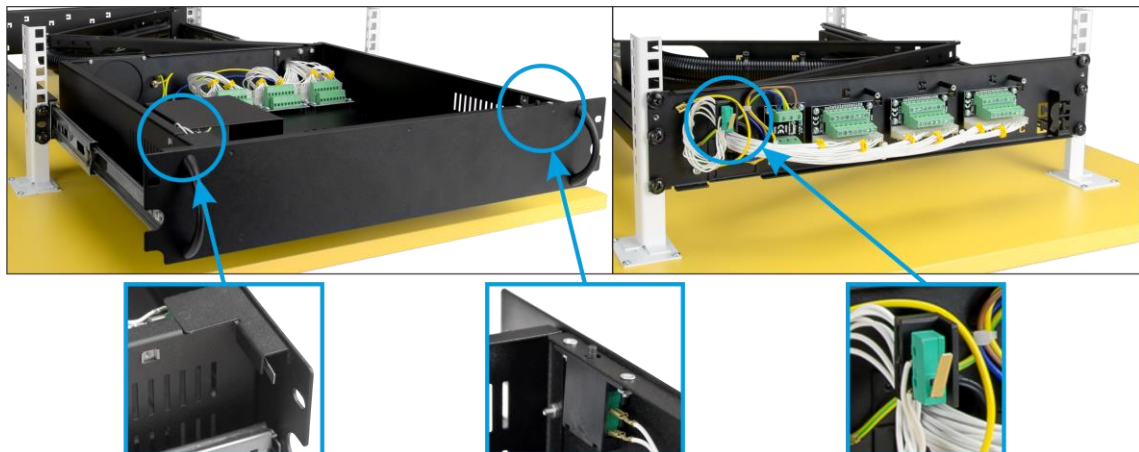

Fig. 5

The ARAD-S2 enclosure is fitted with 3 tamper switches:

1. Pulling out the enclosure from RACK profiles
2. Enclosure opening
3. Patch Panel opening

The enclosure is mounted in the front of the RACK rails - using 2xM6 screws.

The Patch Panel is mounted in the rear of the RACK rails - using 6xM6 screws + patch panel cover plate 2xM3 + 2xM4
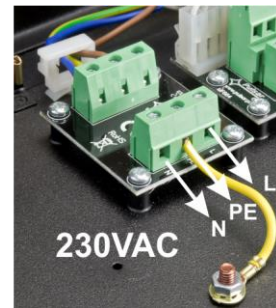

4. PCB boards - mounting:

PCB supply: 230VAC/max. 5A
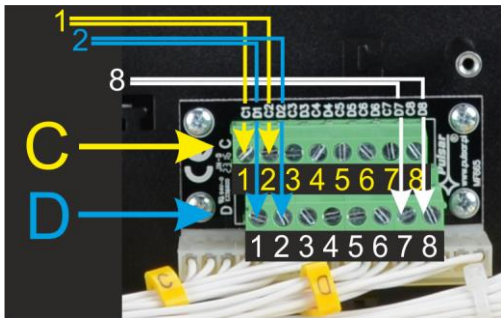
PCB Power Board in the Patch Panel   PCB Power Board in a retractable housing
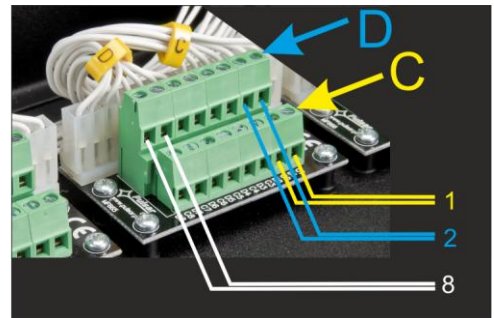

PCB Signal Boards. Single PCB Signal Board allows connecting up to 8 signal/supply lines. The maximum operating conditions of a single line – 30VDC/1.5A.
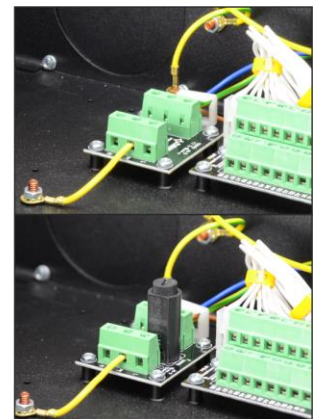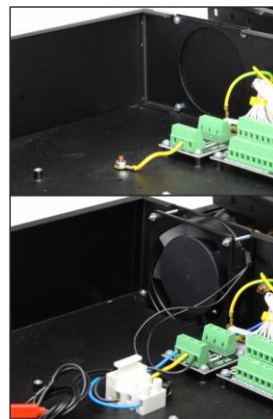
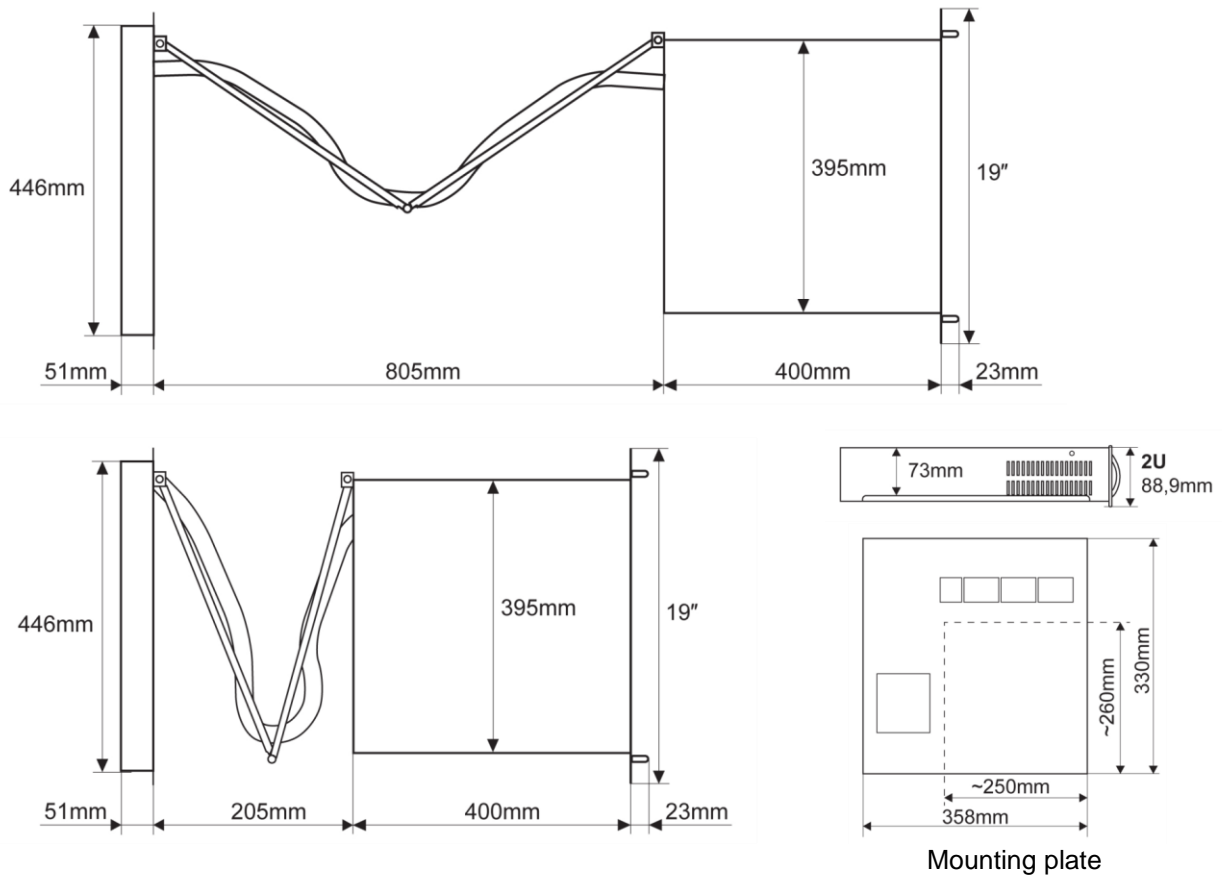PCB Signal Board in the Patch Panel   PCB Signal Board in a retractable housing

5. Additional equipment:

Space for 7Ah battery /TRP/TRZ 20÷80VA transformer / ARAW45 fan/ 230VAC board with the F3,15A melting fuse

6. Dimensioning

Mounting plate

7. Control panels and modules that can be mounted in the enclosure.

- **DSC:** (PC 1404, 1616, 1832, 1864,4020)+ 5108 (4108, 5208, 5100, 4116)
- **Modules:** 3x (4108, 5108, 5208, 5100, and 4116)
    1 x (4204, 4216, 4580, 5400, 5204, 5580, and 5200)
- **PARADOX:** (728ULT, E55, E65, SP4000, SP5500, SP6000, SP7000, EVO48, and EVO192) + ZX8 (ZX4,PGM4)
- **Modules:** 2x (ZX8, ZX4, APR3- HUB2, and PGM4)
    1x (APR3- ADM2)
- **RISCO:** PRO24 + EZ16 (E04, EZ8)
    PRO116, 128, 140
- **Modules:** 2x EZ16 (E04, EZ8)
- **SATEL:** CA4V1, CA5, CA6
    (VERSA5,10, 15, CA10)+ CA10E (CA64E, SM, and MST1)
    (INTEGRA 24, 32) + CA64E, (SM)
- **Modules:** CA64 (PP, EPS, ADR, O-R, O-ROC, O-OC,OPS- OC, OPS- R, OPS- ROC, VGM- 16, SR, and PTSA) + CA64E (SM)
- **PYRONIX:** MATRIX 424, 6, 816, 832, 832+
- **CROW:** RUNNER 4,8
- **TELMOR:** TCA- 824
- **ROEL:** SIGMA 6,12, CERBER
- **ROGER:** PR402, CPR 32- SE
- **EBS:** PX 202A
- **PULSAR:** MS1512, MSR 1512, MSRK 1512
    MS2512, MSR2512, and MSRK2512

8. Technical parameters

Battery compartment	7Ah / 12V
Transformer compartment	TRP: 20÷80VA, TRZ: 20÷80VA
Tamper protection: - Pulling out the enclosure from RACK profiles - Enclosure opening - Patch Panel opening	the C/NO terminals (C/NC closed housing), 1A@30VDC/3A@250VAC the C/NO terminals (C/NC closed housing), 0,5A@30VDC/50VAC the C/NO terminals (C/NC closed housing), 0,5A@30VDC/50VAC
PCB Signal Boards	A/B Board – 8 signal lines - 30VDC/1,5A – 1 pair C/D Board – 8 signal lines - 30VDC/1,5A – 1 pair E/F Board – 8 signal lines - 30VDC/1,5A – 1 pair
PCB Power Board	230VAC/max.5A
Mounting dimensions:	W=19", H=2U
Enclosure dimensions	W=395, H=89, D=400 mm
Net/gross weight:	8,30 / 9,50 [kg]
Finish:	- steel plate 1 / 1,5mm, color black (RAL 9004)
Application:	Indoor
Notes:	- The enclosure is mounted using the ARAS800/1000 rails depending on the depth of the RACK 19" cabinet + 2xM6 screws butt mounted to RACK profiles - Patch Panel mounting – 4xM6 butt mounted to RACK profiles + 2xM6 to ARAS800/1000 rails - The set includes: • protective tube MM020 ø21/ø29 – 0,5m • protective tube MM064 ø6/ø10 – 0,5m • cable tie (black) 100x2,5 - 10 pieces • cable tie (black) 190x4,8 - 4 pieces • Six M6 screws+ cage nuts + plastic washer • 2 M6 screws + plastic washer
Available accessories:	- **MM020** - protective tube ø21/ø29 – signal wires - **MM064** - protective tube ø6/ø10 – for power cord - **ARAW45** - fan - **AWZ618** - 230VAC board with the F3,15A melting fuse - transformers of the TRP/TRZ series: 20÷80VA
Declarations, warranty	CE, 2 years from the production date

WARRANTY
Pulsar (the manufacturer) grants a two-year quality warranty for the equipment, starting from the production date

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MANUFACTURER
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