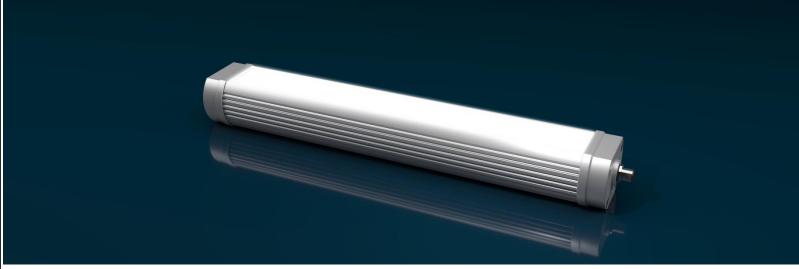
# TRACKALPHA PRO

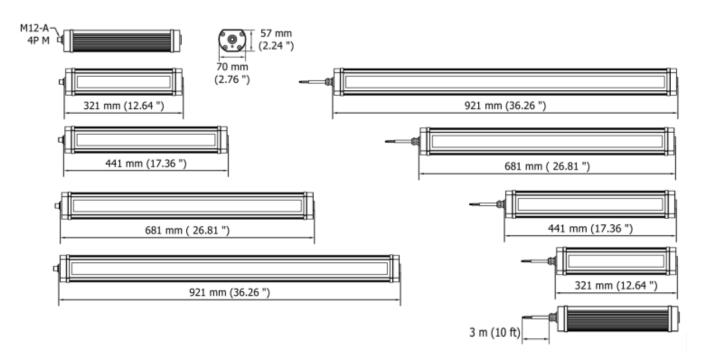




Trackalpha Pro luminaires are the surface mount lights in 120 Vac integrated, and they are the answer as machine lights for comprehensive CNC machines, manufacturing, and automation applications. Trackalpha Pro is the optimum flexible solution for retrofitting old machines thanks to the combination of 2 ¾" diameter housing, M12 connector, and universal mounting brackets. Trackalpha Pro offers four standard lengths and multiple customized sizes preferences thanks to the engineered modular aluminum housing and optimized PCBs. The traditional 10-foot cord or M12 Connector provides a secure, fast, accessible electrical junction to 120 Vac with no additional supply unit. Two standard mounting options are available: rear clips or side mounting brackets; they allow precise adjustment of the light direction up to 90° towards the work area and provide secure clamping and flexible installation of the luminaires on redeveloping machines.

- Housing is made of aluminum alloy resistant to oil, coolants, lubricants, and dust.
- Hardened frosted glass 3/16" thick is debris resistant, coolant backing Free, provides uniform illumination
- Four Standard Lengths to meet the different applications requirement
- 120° Beam opening angle to provide comprehensive and intense illumination
- LED lifespan: 60,000 hours > (L 70)
- Light color temperature 5000 K -- CRI 80
- 120 Vac via M12 or 10ft. (3m) Cable for more flexibility
- Three mounting options for a quick and practical installation are
- TAFX03 side Brackets, TACLIP rear clamping, B03 magnet

### DIMENSIONS



| MECHAN                       |                    | TURES  |                    |                     |                   |                   |           |           |  |  |  |  |
|------------------------------|--------------------|--|--------------------|---------------------|-------------------|-------------------|-----------|-----------|--|--|--|--|
| Model                        | TA0224S01          | TA0224S02  | TA0324S01          | TA0324S02           | TA0524S01         | TA0524S02         | TA0724S01 | TA0724S02 |  |  |  |  |
| Casing<br>Material           |                    |  |                    | Anodized            | aluminum          |                   |           |           |  |  |  |  |
| Side<br>Enclosers            |                    |  |                    | Anodized            | aluminum          |                   |           |           |  |  |  |  |
| Surface<br>Treatment         |                    |  |                    | Natural alumin      | um anodisation    |                   |           |           |  |  |  |  |
| Front Glass                  |                    | Extra clear tempered 0.20 in (5 mm) thick frosted glass IK06 |                    |                     |                   |                   |           |           |  |  |  |  |
| Weight                       | 3.16 lb<br>1,43 kg |  |                    |                     |                   |                   |           |           |  |  |  |  |
| Protection<br>Index          |                    | ·  |                    | P67 Compatible v    | vith NEMA Type 12 | 2                 |           |           |  |  |  |  |
| Impact<br>Resistance         | 1.00 N m           | n/s  | 1.00 N m/s         | 1.00                | N m/s             | 1.00 N m/s        | 1.0       | 00 N m/s  |  |  |  |  |
| Operating<br>Temperatur<br>e |                    |  |                    | 04°F (-20°C) to     | +113°F (+ 45°C)   |                   |           |           |  |  |  |  |
| Mounting                     |                    | TAFX   | 03 Stainless-steel | l side brackets / T | ACLIP Aluminum    | rear Clip / Magne | t B03     |           |  |  |  |  |
| Installation                 |                    |  | Suitable for w     | et location and ur  | der-cabinet and   | surface mount     |           |           |  |  |  |  |

| ELECTRIC                   | CAL FEATU  | JRES                      |            |           |            |           |            |           |  |  |  |  |
|----------------------------|------------|---------------------------|------------|-----------|------------|-----------|------------|-----------|--|--|--|--|
| Model                      | TA0224S01  | TA0224S02                 | TA0324S01  | TA0324S02 | TA0524S01  | TA0524S02 | TA0724S01  | TA0724S02 |  |  |  |  |
| Power Input                | 13         | 13 W 19,5 W 32,5 W 45,5 W |            |           |            |           |            |           |  |  |  |  |
| Power Supply               |            | 100 ÷ 120 VAC 60 Hz       |            |           |            |           |            |           |  |  |  |  |
| Device Power<br>Protection |            |                           |            | Voltag    | e Spike    |           |            |           |  |  |  |  |
| Electrical<br>Connection   | M12-4 4P M | CABLE                     | M12-4 4P M | CABLE     | M12-4 4P M | CABLE     | M12-4 4P M | CABLE     |  |  |  |  |
| Insulation<br>Class        |            |                           |            | Cla       | ss l       |           |            |           |  |  |  |  |

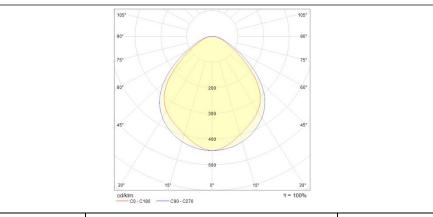
| CONNECTION with M12-4P I | Male A Coding  |     |               |
|--------------------------|----------------|-----|---------------|
| Male                     | Female         | Pin | Connection    |
|                          |                | 1   | HOT 120 V     |
| 2-0-1                    | $1 - \sqrt{2}$ | 2   | GND           |
| 2 -4                     |                | 3   | NEUTRAL O V   |
| ş_∕ ❤                    | Ŧ              | 4   | NOT CONNECTED |

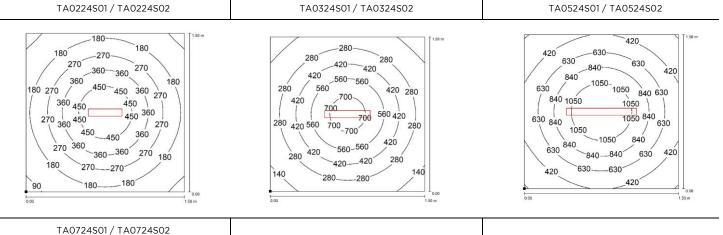
#### CONNECTION with 10 ft. (3m) Cable, Standard length PVC 3G1 mm<sup>2</sup> L= 3 m (17 AWG L. 10 ft) Conductor Connection 2 BLACK 1 Black NEUTRAL . terminal 120V 1 BLACK нот 2 Black \* 0V ŧ 120V YELLOW GROUND GREEN 3 m - 10 ft. Yellow / grees

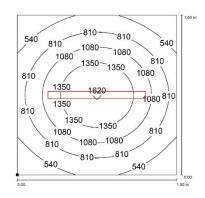
| OPTICAL FE | ATURES              |              |             |     |                  |               |            |
|------------|---------------------|--------------|-------------|-----|------------------|---------------|------------|
| Model      | N° and Type of LEDs | LED Lifespan | Light Color | CRI | Light Beam Angle | Luminous Flux | Efficiency |
| TA0224S01  | 28 Mid Power LED    | 60.000 L70** | 5000 K      | 80  | 120°             | 1300 lm       | 100 lm/W   |
| TA0224S02  | 28 Mid Power LED    | 60.000 L70** | 5000 K      | 80  | 120°             | 1300 lm       | 100 lm/W   |
| TA0324S01  | 42 Mid Power LED    | 60.000 L70** | 5000 K      | 80  | 120°             | 1950 lm       | 100 lm/W   |
| TA0324S02  | 42 Mid Power LED    | 60.000 L70** | 5000 K      | 80  | 120°             | 1950 lm       | 100 lm/W   |
| TA0524S01  | 70 Mid Power LED    | 60.000 L70** | 5000 K      | 80  | 120°             | 3250 lm       | 100 lm/W   |
| TA0524S02  | 70 Mid Power LED    | 60.000 L70** | 5000 K      | 80  | 120°             | 3250 lm       | 100 lm/W   |
| TA0724S01  | 98 Mid Power LED    | 60.000 L70** | 5000 K      | 80  | 120°             | 4550 lm       | 100 lm/W   |
| TA0724S02  | 98 Mid Power LED    | 60.000 L70** | 5000 K      | 80  | 120°             | 4550 lm       | 100 lm/W   |

## PHOTOMETRIC DIAGRAMS









| PLUG OPTION M    | 112 Cable Connector  |              |
|------------------|--|--------------|
| Product pictures | Description  | Code product |
| Q                | Pre-assembled M12 4 Pin, female, A Coding, cable 5 m (10 ft) | M12AFC5      |

| MOUNTING OPTIO   | NS  |              |
|------------------|---|--------------|
| Product pictures | Description   | Code product |
|                  | Robust, versatile and vibration resistant, it is a 70° angle adjustment bracket. Made of stainless steel, it is the perfect solution when you need to adjust the direction of the flow beam in high-vibrating applications. | TAFX03       |
| - Kinghan        | Sturdy, flexible and vibration resistant, it is a 30° angle adjustment bracket. Made of anodized aluminum, it is the perfect solution when you need to retrofit an obsolete machine tools and machining centers.            | TACLIP       |
| *                | Strong magnetic disc made of neodymium. Use along with TAFX03 brackets when you need to move the light frequently and to different positions. Suitable to use in high-vibrating applications.                               | В03          |

| ORDER CO  | DDES  |
|-----------|---|
| Model     | Description   |
| TA0224S01 | TRACKALPHA PRO, 12.64"(321 mm), 120°, 13W, 120Vac, M12-A 4P Male      |
| TA0224S02 | TRACKALPHA PRO, 12.64"(321 mm), 120°, 13W, 120Vac, Cable 10ft (3mt)   |
| TA0324S01 | TRACKALPHA PRO, 17.36"(441 mm), 120°, 19.5W, 120Vac, M12-A 4P Male    |
| TA0324S02 | TRACKALPHA PRO, 17.36"(441 mm), 120°, 19.5W, 120Vac, Cable 10ft (3mt) |
| TA0524S01 | TRACKALPHA PRO, 26.81"(681 mm), 120°, 32.5W, 120Vac, M12-A 4P Male    |
| TA0524S02 | TRACKALPHA PRO, 26.81"(681 mm), 120°, 32.5W, 120Vac, Cable 10ft (3mt) |
| TA0724S01 | TRACKALPHA PRO, 36.26"(921 mm), 120°, 45.5W, 120Vac, M12-A 4P Male    |
| TA0724S02 | TRACKALPHA PRO, 36.26"(921 mm), 120°, 45.5W, 120Vac, Cable 10ft (3mt) |
| TAFX03    | TRACKALPHA, stainless steel side brackets kit 90°                     |
| TACLIP    | TRACKALPHA, rear mounting clips kit                                   |
| B03       | Magnet Diam 1.9" (48 mm)  |
| M12AFC5   | Pre-assembled M12 4Pin, female, A Coding, CABLE 5mt, UL               |

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#### **Sales Summary**

## TRACKALPHA PRO 24 VDC

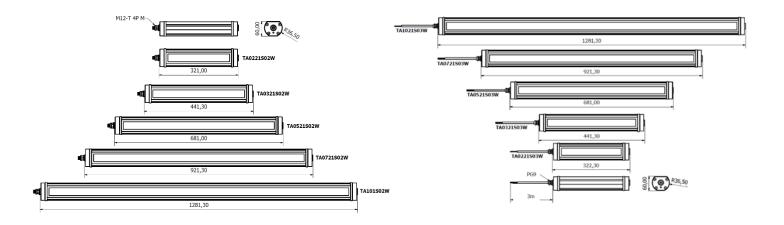




TRACKALPHA PRO is the integrated 24Vdc surface-mounted machine light for generic CNC machines, manufacturing machinery and industrial automation. TRACKALPHA PRO is the perfect versatile solution for retrofitting on machines that require it, thanks to the combination of 70 mm diameter profile, MI2 connector and mounting supports available in two versions: anodized aluminum clips or side mounting brackets that allow precise adjustment of the direction of the luminous flux up to 90° and provide secure fastening and flexible installation. The side brackets can also be attached using the incredibly strong neodymium magnet for added strength in confined spaces. TRACKALPHA PRO offers five standard lengths thanks to the perfect modular structure in extruded aluminum and optimized PCBs. The original 3 meter cable or the MI2 connector cod. T provide a safe, quick and simple electrical connection.

- Aluminium housing resistant to oil, coolants, lubricants, and dust.
- LED lifespan: 60,000 hours > (L 70)
- Hardened frosted glass 5 thick is debris resistant, it doesn't change color and provides consistent illumination
- Light color temperature 5000 K CRI 80
- Four standard lengths available to meet all different applications requirements
- 24V via M12 or 3m cable for more flexibility
- 120° lens to provide wide and intense lighting
- Two mounting options for a quick and practical installation: TAFX03 side brackets, TACLIP rear clips,
- Approval: cURus in compliance with UL2018 / CSA / CE

#### DIMENSIONS



| MECHAI                       | NICAL FE   | ATURES                          |                     |                     |                     |                     |                     |                     |                       |                      |  |
|------------------------------|--|---------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----------------------|----------------------|--|
| Model                        | TA0221S02W   | TA0221S03W                      | TA0321S02W          | TA0321S03W          | TA0521S02W          | TA0521S03W          | TA0721S02W          | TA0721S03W          | TA1021S02W            | TA1021S03W           |  |
| Casing<br>Material           | Anodized extruded aluminum                                   |                                 |                     |                     |                     |                     |                     |                     |                       |                      |  |
| Side<br>Enclosers            |  | Anodized aluminum               |                     |                     |                     |                     |                     |                     |                       |                      |  |
| Surface<br>Treatment         | Standard: 10 microns of natural aluminum solution oxidation  |                                 |                     |                     |                     |                     |                     |                     |                       |                      |  |
| Front Glass                  | Extra clear tempered 0.20 in (5 mm) thick frosted glass IK06 |                                 |                     |                     |                     |                     |                     |                     |                       |                      |  |
| Weight                       | 2.65 lb<br>(1.20kg)  | 3.09 lb<br>(1.4kg)              | 3.64 lb<br>(1.65kg) | 4.08 lb<br>(1.85Kg) | 5.62 lb<br>(2.55kg) | 6.06 lb<br>(2.75kg) | 7.28 lb<br>(3.30kg) | 7.72 lb<br>(3.50kg) | 10.25 lb<br>(4.65 kg) | 10.70 lb<br>(4.85kg) |  |
| Protection<br>Index          |  |                                 |                     | IP67                | Compatible wi       | th NEMA Type        | 12                  |                     |                       |                      |  |
| Impact<br>Resistance         | 1.00 M   | N m/s                           | 1.00 N              | N m/s               | 1.00 N              | l m/s               | 1.00 N              | N m/s               | 1.00                  | N m/s                |  |
| Operating<br>Temperatur<br>e |  | 04°F (-20°C) to +113°F (+ 45°C) |                     |                     |                     |                     |                     |                     |                       |                      |  |
| Installation                 |  |                                 | TAFX02 Stair        | nless-steel side    | e brackets / TA     | CLIP Aluminu        | m rear Clip /       | Magnet B03          |                       |                      |  |

| ELECTRI                    |            | TURES            |            |               |                                |                 |              |            |                |            |  |
|----------------------------|------------|------------------|------------|---------------|--------------------------------|-----------------|--------------|------------|----------------|------------|--|
| Model                      | TA0221502W | TA0221S03W       | TA0321S02W | TA0321S03W    | TA0521S02W                     | TA0521S03W      | TA0721S02W   | TA0721S03W | TA1021S02W     | TA1021S03W |  |
| Power Input                | 13         | W                | 19.5       | ōW            | 32.5 W                         |                 | 45.5 W       |            | 65 W           |            |  |
| Power Supply               |            | 22-28 Vdc        |            |               |                                |                 |              |            |                |            |  |
| Current                    | 0.56 A @   | 24 Vdc           | 0.85 A @   | ) 24 Vdc      | 1.35 A @ 24 Vdc 1.9 A @ 24 Vdc |                 |              |            | 2.7 A @ 24 Vdc |            |  |
| Device Power<br>Protection |            |                  |            | Full pro      | otection agains                | st reverse pola | rity         |            |                |            |  |
| Electrical<br>Connection   | M12        | Cable            | M12        | Cable         | M12                            | Cable           | M12          | Cable      | M12            | Cable      |  |
| Insulation<br>Class        |            | Class III (SELV) |            |               |                                |                 |              |            |                |            |  |
| Efficiency<br>Class        |            |                  | E (Inte    | grated LED mo | odule) complia                 | nt with UE LA   | W No. 2019/2 | 2020       |                |            |  |

| CONNECTION* with M12-4P Ma | ale T Coding |     |               |
|----------------------------|--------------|-----|---------------|
| Male                       | Female       | Pin | Connection    |
|                            |              | 1   | +24 Vdc       |
| 4 3                        | 401          | 2   | Not Connected |
| 12                         | 3 2          | 3   | 0 Vdc         |
|                            |              | 4   | Not Connected |

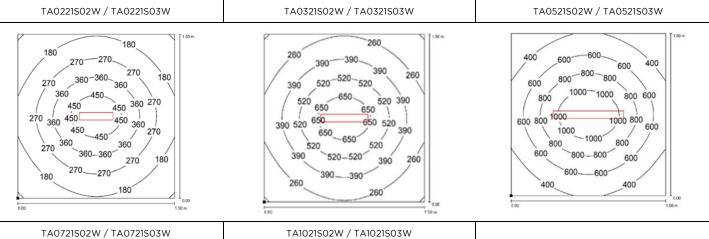
| CONNECTION with 10 ft. (3m) Cable, Standard length                  |  |         |  |  |
|---|--|---------|--|--|
| PVC 2x 0.17 in <sup>2</sup> (0.75 mm <sup>2</sup> ) L= 10 ft. (3 m) | 5 mm <sup>2</sup> ) L= 10 ft. (3 m) Conductor Connection |         |  |  |
| terminal<br>@0.09 - L.0.24"<br>@2,2 - L.6mm<br>1 : +24Vdc           | 1 Black  | +24 Vdc |  |  |
| 1: +2+Vdc<br>2: 0Vdc<br>1" (25mm)<br>10' (+1')<br>3m (+0.025m)      | 2 Black  | 0       |  |  |

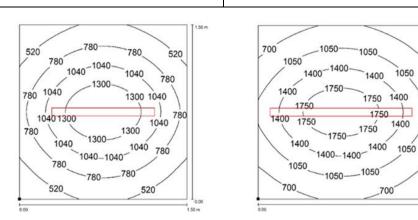
| Model      | N° and Type of LEDs | LED Lifespan | Light Color | CRI | Light Beam Angle | Luminous Flux | Efficienc |
|------------|---------------------|--------------|-------------|-----|------------------|---------------|-----------|
| TA0221S02W | 42 Mid Power LED    | 60.000 L70** | 5000 K      | 80  | 120°             | ~1510 lm      | ~116 lm/\ |
| TA0221S03W | 42 Mid Power LED    | 60.000 L70** | 5000 K      | 80  | 120°             | ~1510 lm      | ~116 lm/\ |
| TA0321S02W | 63 Mid Power LED    | 60.000 L70** | 5000 K      | 80  | 120°             | ~2265 lm      | ~116 lm/' |
| TA0321S03W | 63 Mid Power LED    | 60.000 L70** | 5000 K      | 80  | 120°             | ~2265 lm      | ~116 lm/  |
| TA0521S02W | 105 Mid Power LED   | 60.000 L70** | 5000 K      | 80  | 120°             | ~3770 lm      | ~116 lm/  |
| TA0521S03W | 105 Mid Power LED   | 60.000 L70** | 5000 K      | 80  | 120°             | ~3770 lm      | ~116 lm/  |
| TA0721S02W | 147 Mid Power LED   | 60.000 L70** | 5000 K      | 80  | 120°             | ~5280 lm      | ~116 lm/  |
| TA0721S03W | 147 Mid Power LED   | 60.000 L70** | 5000 K      | 80  | 120°             | ~5280 lm      | ~116 lm/  |
| TA1021S02W | 210 Mid Power LED   | 60.000 L70** | 5000 K      | 80  | 120°             | ~7550 lm      | ~116 lm/  |
| TA1021S03W | 210 Mid Power LED   | 60.000 L70** | 5000 K      | 80  | 120°             | ~7550 lm      | ~116 lm/  |

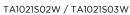
## **PHOTOMETRIC DIAGRAMS**

120° Flow beam









-1400-

1750

1750-

1050-1050

1050

1750

1400

1750 1400

1750

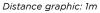
,700

1400

1050

50 m

1.50 m



## PLUG OPTION M12 Cable Connector

Product pictures

Description



M12; PIN: 4; female; T Code-Power; Straight for cable Ø 0.32-0.39 (8-10 mm); screw terminal N131

N13110001040302

| MOUNTING OPTIONS |   |              |
|------------------|---|--------------|
| Product pictures | Description   | Code product |
|                  | Robust, versatile and vibration resistant, it is a 90° angle adjustment<br>bracket. Made of stainless steel, it is the perfect solution when you need to<br>adjust the direction of the flow beam in high-vibrating applications. | TAFX02       |
| - Kinghan        | Sturdy, flexible and vibration resistant, it is a 30° angle adjustment bracket.<br>Made of anodized aluminum, it is the perfect solution when you need to<br>retrofit an obsolete machine tools and machining centers.            | TACLIP       |
| ()               | Strong magnetic disc made of neodymium. Use along with TAFX02 brackets when you need to move the light frequently and to different positions. Suitable to use in high-vibrating applications.                                     | В03          |

| ORDER CODES     |   |
|-----------------|---|
| Model           | Description   |
| TA0221S02W      | TRACKALPHA PRO, 12.64"(321 mm), 120°, 13W, 24Vdc, M12-T 4P Male                             |
| TA0221S03W      | TRACKALPHA PRO, 12.64"(321 mm), 120°, 13W, 24Vdc, Cable 10ft (3mt)                          |
| TA0321S02W      | TRACKALPHA PRO, 17.36"(441 mm), 120°, 19.5W, 24Vdc, M12-T 4P Male                           |
| TA0321S03W      | TRACKALPHA PRO, 17.36"(441 mm), 120°, 19.5W, 24Vdc, Cable 10ft (3mt)                        |
| TA0521S02W      | TRACKALPHA PRO, 26.81"(681 mm), 120°, 32.5W, 24Vdc, M12-T 4P Male                           |
| TA0521S03W      | TRACKALPHA PRO, 26.81"(681 mm), 120°, 32.5W, 24Vdc, Cable 10ft (3mt)                        |
| TA0721S02W      | TRACKALPHA PRO, 36.26"(921 mm), 120°, 45.5W, 24Vdc, M12-T 4P Male                           |
| TA0721S03W      | TRACKALPHA PRO, 36.26"(921 mm), 120°, 45.5W, 24Vdc, Cable 10ft (3mt)                        |
| TA1021S02W      | TRACKALPHA PRO, 50.43"(1281 mm), 120°, 65W, 24Vdc, M12-T 4P Male                            |
| TA1021S03W      | TRACKALPHA PRO, 50.43"(1281 mm), 120°, 65W, 24Vdc, Cable 10ft (3mt)                         |
| TAFX02          | TRACKALPHA, stainless steel side brackets kit 90°   |
| TACLIP          | TRACKALPHA, rear mounting clips kit   |
| B03             | Magnet Diam 1.9" (48 mm)  |
| N13110001040302 | M12; PIN: 4; female; T Code-Power; Straight for cable Ø 0.32-0.39 (8-10 mm); screw terminal |

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