



NATIONAL OPTICAL  
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**MONSOON**  
**Bill of Materials**  
**Power Supply**  
**Wall Mount 30W**

**Dwg No.: MNSN-EL-02-0011 Rev: OD**  
**Next Assembly:** MNSN-EL-02-0010

**Reference Documents:** Wiring diagram: MNSN-EL-05-0014  
Wiring List: MNSN-EL-05-0015

**MONSOON**  
**30W Wall-Mount Power Supply BOM**

| LTR | DESCRIPTION    | ECR | DATE      | BY  | APPRVD |
|-----|----------------|-----|-----------|-----|--------|
| OD  | Original Issue |     | 8/10/2009 | dms |        |
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## MONSOON 30W Wall-Mount Power Supply BOM

MNSN-EL-02-0011

8/20/2009

| Item | Ref Des  | Qty | Description   | Mfg             | Mfg PN             | Source              |
|------|----------|-----|---|-----------------|--------------------|---------------------|
| 1    | PS1      | 1   | Linear Gold-Box Single Supply, 5VDC   | Acopian         | A5MT510M           | Acopian             |
| 2    | PS2      | 1   | Linear Gold-Box Single Supply, 32VDC  | Acopian         | A32MT180M          | Acopian             |
| 3    | PS3      | 1   | Linear Gold-Box Dual Tracking Supply, +/-15VDC  | Acopian         | TD15-160M          | Acopian             |
| 4    | PS4      | 1   | Linear Gold-Box Dual Tracking Supply, +/-5VDC   | Acopian         | TD5-150M           | Acopian             |
| 5    | PS5      | 1   | AC-DC Mini Encapsulated Supply, 5VDC  | Acopian         | 5EB150             | Acopian             |
| 6    |          | 1   | Altered Item Drawing:MNSN-EL-02-1025 - box<br>Altered Item Drawing:MNSN-EL-02-1026 - internal panel<br>NEMA Metal Box, hinged, 14"x12"x8" | Bud Industries  | SN-3708            | Digikey 377-1509-ND |
| 7    | PEM      | 1   | Power entry module  | Qualtek         | 880-06/006         | NOAO-StkRm-F278C    |
| 8    | K1       | 1   | Relay SSR SPST-NO 240VAC 5A DIN, 5 Vdc in   | Crydom          | MS11-CX240D5       | Digikey CC1559-ND   |
| 9    | K2       | 1   | Electronic Timer 22.5 mm, DIN, 10A 24-240VAC/DC   | Crouzet         | 88865115           | Digikey 646-1180-ND |
| 10   | X1       | 1   | Altered Item Drawing: MNSN-EL-02-1028<br>Fan, Sprite AC induction motor, 80x80x42mm   | Comair/Rotron   | SU2C5              | Digikey CR253-ND    |
| 11   | X1       | 1   | Power Cord Fan Right Angle 36"  | Qualtek         | 07190-36           | Digikey CR322-ND    |
| 12   | X1       | 1   | Metal finger guard, 80x80mm   | Qualtek         | 08172              | Digikey CR229-ND    |
| 13   | X1       | 1   | EMI/RFI shield, 80x80mm   | Qualtek         | QSB-80-01          | Digikey Q330-ND     |
| 14   | X1       | 1   | Filter assembly, 45 PPI, 80x80mm  | Qualtek         | 09325-F/45         | Digikey CR214-ND    |
| 15   | T1-T10   | 10  | Terminal block, DIN UK5-N   | Phoenix Contact | 3004362            | Digikey 277-1501-ND |
| 16   | F1-F5    | 5   | Fuse block, DIN UK5-HESI  | Phoenix Contact | 3004100            | Digikey 277-1557-ND |
| 17   | T11-18   | 4   | Terminal block, double-level, top Lvl bussable, DIN UKK 5   | Phoenix Contact | 2774017            | Digikey 277-1491-ND |
| 18   | (T11-18) | 1   | Altered Item drawing:MNSN-EL-02-1030<br>Insertion bridge, 10-pos., divisible, fully insulated EB 10-6                                     | Phoenix Contact | 0201139            | Digikey 277-1511-ND |
| 19   | (T11-18) | 1   | Term Blk Spacer Cover 2.5mm, for dbl lvl, gray DG-UKK 3/5   | Phoenix Contact | 2770817            | Digikey 277-1490-ND |
| 20   | (T11-18) | 1   | Term Blk Spacer Plate 6.2mm, for dbl lvl, gray DP-Ukk 3/5   | Phoenix Contact | 2770794            | Digikey 277-1489-ND |
| 21   | (T1-T10) | 2   | Altered Item Drawing:MNSN-EL-02-1032 (6 pos)<br>Altered Item Drawing: MNSN-EL-02-1031 (4 pos)<br>Fixed bridge, 10 terminal strip FBI 10-6 | Phoenix Contact | 0203250            | Digikey 277-1514-ND |
| 22   |          | 1   | Altered Item Drawing: MNSN-EL-02-1029<br>DIN rail, NS 35/7.5 PERF 35x7.5mm, cut to length   | Phoenix Contact | 5602100<br>0807012 | Digikey 277-1510-ND |
| 23   |          | 2   | End bracket E/NS 35N  | Phoenix Contact | 0800886            | Digikey 277-1523-ND |
| 24   |          | 2   | End cover D-UK 4/10   | Phoenix Contact | 3003020            | Digikey 277-1498-ND |
| 25   |          | 3   | Marker strip, ZB-6 unprinted, pkg of 10   | Phoenix Contact | 1051003            | Digikey 277-1473-ND |
| 26   |          | 1   | Detail Drawing: MNSN-EL-02-1027<br>Connector Panel, 6061 alloy  | NOAO            | MNSN-EL-02-1027    |                     |
| 27   | R2-R9    | 8   | Resistor, axial 10.0Ω 1/8W 1% metal film  | RN55D10R0F      | Dale               | NOAOSTkRm-5801A     |
| 28   | F1       | 1   | Fuse, 1/4A @ 250V slow blo, 5x20mm  | Littelfuse      | 0218.250HXP        | Digikey F2413-ND    |

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|------|---------|---------|--|----------------------|-------------------------------|---------------------|
| 29   | F2      | 1       | Fuse, 1.25A @ 250V slow blo, 5x20mm                    | Littelfuse           | 02181.25HXP                   | Digikey F2429-ND    |
| 30   | F3      | 1       | Fuse, 1.5A @ 250V slow blo, 5x20mm                     | Bel Fuse             | 5TT 1.5-R                     | Digikey 507-1293-ND |
| 31   | F4      | 1       | Fuse, 6/10A @ 250V slow blo, 5x20mm                    | Littelfuse           | 0239.600HXP                   | Digikey F2699-ND    |
| 32   | F6      | 1       | Fuse, 5A @ 250V ultra fast   i2t =42.8 blo, 5x20mm,    | Littelfuse           | 0217005.HXP                   | Digikey F2395-ND    |
|      |         |         | i2t<60   i2t=42  | Cooper/Bussman       | BK/S500-5-R                   | Digikey 283-2686-ND |
| 33   | F5      | 1       | Fuse, 1A @ 250V slow blo, 5x20mm                       | Littelfuse           | 0218001.HXP                   | Digikey F2419-ND    |
| 34   | J1      | 1       | Con, Circular, wall mnt, shell 20, 16 contacts, socket | ITT Cannon           | KPSE02E20-16S                 | PEI Genesis         |
| 35   | J2      | 1       | Con, Circular, wall mnt, shell 14, 19 contacts, socket | ITT Cannon           | KPSE02E14-19S                 | PEI Genesis         |
| 36   | (J1)    | 1       | Nut Plate shell size 20                                | Fastener Specialty   |                               | Fastener Specialty  |
| 37   | (J2)    | 1       | Nut Plate shell size 14                                | Fastener Specialty   |                               | Fastener Specialty  |
| 38   | (R2-R9) | ~1.5 ft | Sleeving, teflon 22 awg                                |                      |                               |                     |
| 39   |         | 16      | Lug, #8 RED, 22-18 AWG RING                            | Tyco Electronics     | 31890                         |                     |
| 40   |         | 26      | Lug, #8 BLUE, 16-14 AWG RING                           |                      | 3KG42                         |                     |
| 41   |         | 16      | Lug, #8 YELLOW, 26-24 AWG RING                         | 3M                   | MNG24-8RK                     |                     |
| 42   |         | 5       | Lug, #10 BLUE, 16-14 AWG RING                          | Tyco Electronics     | 320574                        |                     |
| 43   |         | 3       | Lug, BLUE, 16-14 AWG RIGHT ANGLE CRIMP                 | Panduit              | DNFR14-250FIB                 |                     |
| 44   |         | 2       | Ferrule, #18 YEL                                       | Paladin/ Weidmuller  | 46300                         |                     |
| 45   |         | 3       | Ferrule, #22 TURQUOISE                                 | Weidmuller           | 902577                        |                     |
| 46   |         | 39      | Ferrule, #16 RED                                       | Paladin/ Weidmuller  | 46310                         |                     |
| 47   |         | 10      | CABLE TIES   | Richco               | MS3367-4-9                    |                     |
| 48   |         | 10      | CABLE TIES   | Richco               | MS3367-5-9                    |                     |
| 49   |         | 4       | Screw, M5 x 10 Phillips head                           | Nema box hardware    | M5 x 10 LG PHIL<br>Head Screw |                     |
| 50   |         | 11      | Screw, M5 x 10 stainless button head cap               |                      | M5 x 10 LG BHCS               |                     |
| 51   |         | 4       | Screw, M4 x 8 stainless button head cap                |                      | M4 x 8 LG BHCS                |                     |
| 52   |         | 4       | Screw, M3 x 12 stainless flat head cap                 |                      | M3 x 12 LG FHCS               |                     |
| 53   |         | 2       | Screw, M3 x 8 stainless flat head cap                  |                      | M3 x 8 LG FHCS                |                     |
| 54   |         | 16      | Screw, #8 x 0.5 self tapping                           | P/S back plate screw | #8 x .5 LG                    |                     |
| 55   |         | 12      | Screw, #4 x 0.31 stainless phillips head               |                      | #4 x .31 LG                   |                     |
| 56   |         | 1       | Nut, M5 stainless hex                                  |                      | M5 hex nut                    |                     |
| 57   |         | 4       | Washer, M5 stainless flat                              |                      | M5 washer                     |                     |
| 58   |         | 8       | Washer, M5 stainless split                             |                      | M5 Split washer               |                     |