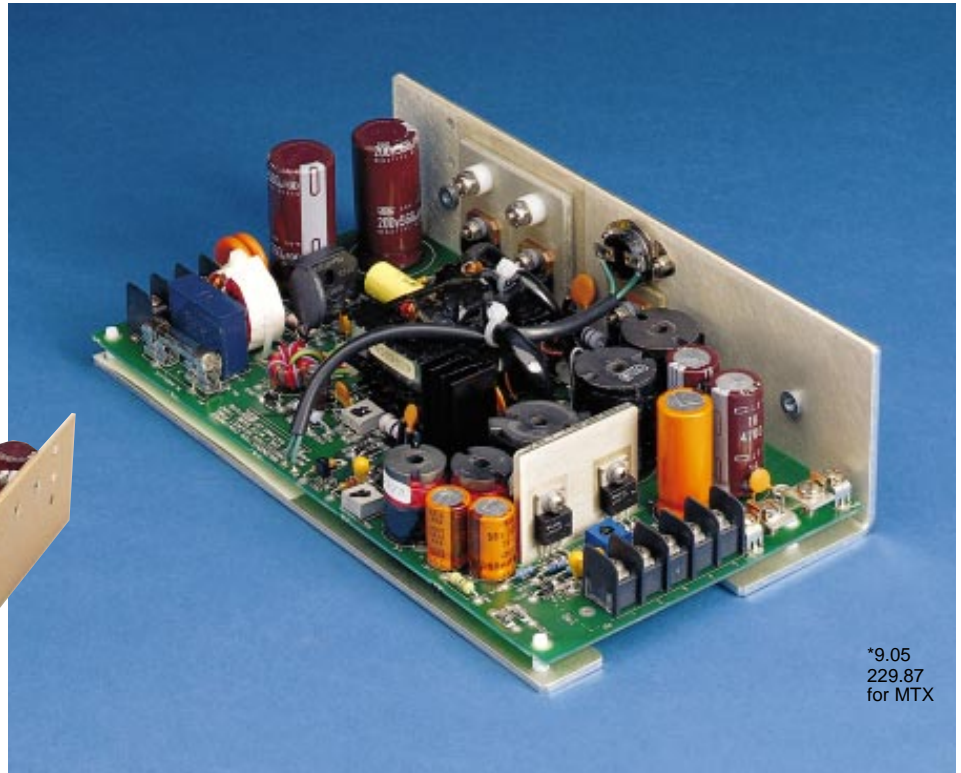


**MDT-160**  
**MTC-160**  
**MDT-220**



\*9.05  
229.87  
for MTX

**Featuring:**

- 9" x 5" x 2.5" package
- Proven low component count design
- High power densities
- Meets international safety agency requirements
- High peak currents for motor starting
- Remote sense, thermal protection, and OVP
- Cannot be damaged by no load or low line conditions
- AC automatic line selection option

**STANDARD MDT SERIES**

| MODEL         | PWR | OUTPUT #1 | OUTPUT #2        | OUTPUT #3   | OUTPUT #4   |
|---------------|-----|-----------|------------------|-------------|-------------|
| MDT-163-0512R | 160 | +5V @ 25A | +12V @ 4/9 A pk  | +12V @ 1.5A |             |
| MDT-164-1212R | 160 | +5V @ 25A | +12V @ 4/9 A pk  | +12V @ 1A   | -12V @ 1A   |
| MDT-164-2412R | 160 | +5V @ 20A | +24V @ 3/6 A pk  | +12V @ 1A   | -12V @ 1A   |
| MDT-223-0512R | 220 | +5V @ 30A | +12V @ 6/10 A pk | 12V @ 2.5A  |             |
| MDT-224-1212R | 220 | +5V @ 30A | +12V @ 6/10 A pk | +12V @ 1.5A | -12V @ 1.5A |
| MDT-224-2412R | 220 | +5V @ 25A | +24V @ 4/8 A pk  | +12V @ 1.5A | -12V @ 1.5A |

**TELECOM MTC SERIES**

| MODEL        | PWR | OUTPUT #1 | OUTPUT #2   | OUTPUT #3   |
|--------------|-----|-----------|-------------|-------------|
| MTC-163-0515 | 160 | +5V @ 30A | +15V @ 1.5A | -12V @ 1.5A |

**MASS STORAGE MDT-223-1212R**

| MODEL         | PWR | OUTPUT #1 | OUTPUT #2         | OUTPUT #3 |
|---------------|-----|-----------|-------------------|-----------|
| MDT-223-1212R | 220 | +5V @ 10A | +12V @ 10/16 A pk | -12V @ 1A |

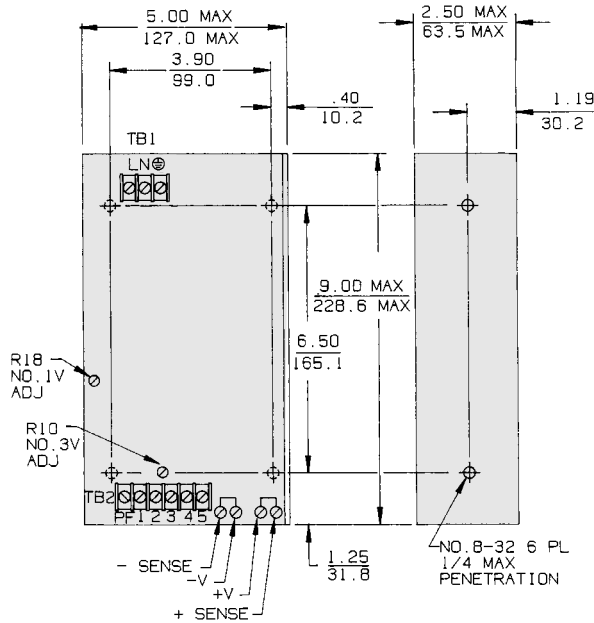
These are Condor's lower power series. They are ideal for new OEM products that are designed for future expansion. Outputs start at 160 watts and power needs can go to 350 watts by using the MAX-350 series without changing the footprint.

You'll get up to 30 Amps for logic and memory, and peak currents up to 16 Amps for motor starting in a package measuring only 9" x 5" x 2.5".

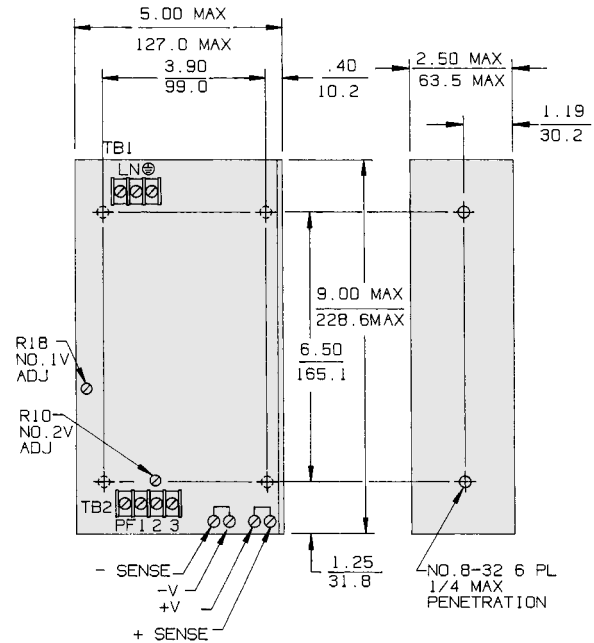
Other features like high power densities, AC autoline select option, and meeting international safety requirements, give design flexibility, low price, and worldwide marketability.

Check the specifications of these power supplies for your next OEM computer-based or telecom product design.

**MDT-160, 220**  
2.6 lbs - 1.2 kgs



**MTC-160**  
2.6 lbs - 1.2 kgs



Dimensions: Inches  
Millimeters

**SPECIFICATIONS: ALL MODELS**

**INPUT**

**AC Input:** 90-132 Vac/180-264 Vac, 47 to 63 Hz. User selectable. See option "A" for automatic line selection. Internally fused for 7 A.  
**Inrush:** Cold start AC current is less than 16 A at 115 Vac and 32 A at 230 Vac. Limited by thermistor.  
**Holdup Time:** 16 ms minimum after removal of power, at nominal line, full load.  
**Efficiency:** 75% typical.  
**Brownout Protection:** Holds regulation to 85 Vac or 170 Vac.

**OUTPUT**

**Adjustability:** Main output and output #3 user adjustable  $\pm 5\%$  minimum. Output #4 (output #3 in MTC series) is not adjustable and has  $\pm 5\%$  initial accuracy.  
**Line & Load Reg:**  $\pm 1\%$  over AC input range and 0 to 100% load change. On MDT series only, output #2 holds  $\pm 5\%$  total regulation band, including the combined effects of line regulation, load regulation for a load change of  $\pm 40\%$  from 60% initial load, and cross regulation due to a load change of  $\pm 25\%$  on the 5 V line from 60% initial load. Maximum combined currents on outputs #1 and 2 cannot exceed output #1 rating, except for MDT-223-1212R. Main +5 V output requires minimum load of 20% for all models.  
**Ripple & Noise:** Less than 1% p-p or 100 mV, whichever is greater.  
**Remote Sense (+5V):** Compensates for 250 mV total line drop. Open sense lead protection.  
**Temperature Coefficient:** 0.02% per degree C.  
**Stability:** 0.1% over 8 hours after 30 minutes warm-up.  
**Transient Response (+5V):** Output voltage returns to within 1% in less than 500  $\mu$ s for a 50% load change. Peak transient does not exceed 5%.  
**Overload Protection:** All outputs are protected against overload and short circuit. Automatic recovery upon removal of fault.  
**Overvoltage Protection (+5V):** Protects load against power supply induced overvoltage. Trip point is factory set so that output voltage cannot exceed 6.8 V.  
**Reverse Voltage:** Protected against reverse voltage up to supply current rating.

**ENVIRONMENTAL**

**Thermal Protection:** Shuts down power supply if overheated. Automatic recovery.  
**Temperature Range:** 0° to 50°C at full ratings. Derate to half power at 70 °C.  
**Safety Agencies:** Most models are approved to UL1950; CSA 22.2 #234; IEC 950 and TÜV EN60950, Class 1 SELV, CE 72/23/EEC/93/68EEC (low voltage directive).  
**Conducted RFI:** Meets FCC Part 15, Subpart J, Class A; EN55022 Class B; CISPR 22 Class B.  
**Output Isolation:** Isolated from ground 50 Vdc.  
**Cooling:** 30 CFM required to achieve full ratings. MDT-160 models are convection cooled.

**OPTIONS:**

**Option "A", AC Auto-Range:** Automatically selects proper AC line voltage range to enable power operation at either 115 or 230 Vac without user intervention.  
**Option "P", AC Power Fail:** Provides TTL "0" 5 ms before output voltage goes out of regulation band upon loss of AC power. VMEbus compatible, provides 48 mA sink current capability.

Consult factory for other available options.

**AC INPUT**

| FUNCTION     | 115 VAC       | 230 VAC       | CONNECTOR                                  |
|--------------|---------------|---------------|--|
| Input Select | Short         | Open          | .110 male Fastons or #16 bus jumper        |
| TB1- (L)     | Line          | Line 1        | Barrier strip #6-32 screws<br>3/8" centers |
| TB1- (N)     | Neutral       | Line 2        |  |
| TB1- (⊕)     | Safety Ground | Safety Ground |  |

**DC OUTPUT**

| FUNCTION  | MDT-163/223  | MDT-164/224  | MTC-163      | CONNECTOR                                     |
|-----------|--------------|--------------|--------------|---|
| Output #1 | Terminal +5  | Terminal +5  | Terminal +5  | Bus bars<br>#6-32screws                       |
|           | Terminal COM | Terminal COM | Terminal COM |   |
| Output #2 | TB2-3 (+)    | TB2-4 (+)    | TB2-3 (+)    | Barrier strip<br>#6-32 screws<br>3/8" centers |
|           | TB2-4 (Rtn)  | TB2-5 (Rtn)  | TB2-2 (Rtn)  |   |
| Output #3 | TB2-2 (+)    | TB2-3(+)     | TB2-1 (-)    |   |
|           | TB2-1 (Rtn)  | TB2-2 (Rtn)  | TB2-2 (Rtn)  |   |
| Output #4 |              | TB2-1 (-)    |              |   |
|           |              | TB2-2 (RTN)  |              |   |

Note: Return lines (Rtn) are connected to power supply common(COM)

**STATUS AND CONTROL**

| FUNCTION                          | LOCATION     | NOTES               | CONNECTOR    |
|-----------------------------------|--------------|---------------------|--------------|
| Remote Sense                      | Terminal + S | Output #1 Sense     | #6-32 screws |
|                                   | Terminal - S | Output #1 Sense Rtn |              |
| AC Power Fail (optional function) | Terminal PF  | Reference to (- S)  |              |