

# nrg100GMT10-M

Power :: 100A GMT Fuse Panel with nrgSMART™ Remote Monitoring

## Overview

The Telect nrg100GMT10-M 100A dual-feed 10/10-position GMT fuse panel features -48V operating voltage to fit in legacy and “next-gen” network applications, with advanced circuit level monitoring features engineered into a standard 1RU footprint. Each circuit supports up to 20A fuses in each position, providing ample capacity for distribution to a broad range of components.

The panel provides total front access to fuses and LED status. Below the status LED console is a pull-out designation card holder.

All terminals for inputs, outputs, ground and alarms are on the rear of the panel. All terminals are covered by a single full-width transparent terminal cover:

- Inputs are studs for dual-hole lugs
- Ground terminals accept either single- or dual-hole lugs
- Output screw-post terminals accept either ring or forked lugs, as well as bare wire
- External power and fuse alarms are wire wrap pins

The GMT fuse holders are mounted inverted so that the GMT indicator flag flips downward when tripped, making identification and detection easier, especially on taller racks. In addition, the GMT fuse holders/sensors are generously spaced for easy grip of fuses and better heat dissipation.



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## Primary Benefits

- Individual circuit monitoring
  - ◊ High accuracy, 100% passive monitoring, modular sensor modules
- Collect feed voltage, circuit current and temperature
- Network data collection
  - ◊ Data is collected and sent to a customer's network management system via SNMP

## Front View



A Feed GMT Sensors Alarm Card Designation Card B Feed GMT Sensors

## Rear View

B Feed Inputs/Returns 1/4 -20

PWR and FUSE Dry Contact Alarm Terminations

Grounding 1/4 - 20

A Feed Inputs/Returns 1/4 -20



B Feed GMT Line/Return  
#6 Single Screw Terminal

Temperature Probe Inputs

Removable Screw-Down Terminal Block for nrgNET

A Feed GMT Line/Return  
#6 Single Screw Terminal

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## Specifications

Inputs	
Voltage range, nominal voltage	-40V to -60V (Nominal -48 VDC)
Max. input load rating	100A per side at max
Short circuit withstand rating	450A
Input terminal studs (with KEPS, nuts and flat washers) for dual-hole compression lugs	<ul style="list-style-type: none"><li>One pair of 1/4-20 studs on 5/8 in. centers per terminal [max. lug width of .52 in. (13.2 mm)]</li><li>Torque nut (using 7/16 in. or 12 mm wrench) to 50 in.-lb. (~5.6 N•m), max.</li></ul>
Outputs	
GMT output terminals for compression lugs	<ul style="list-style-type: none"><li>10 removable, #6-32 panhead screws (max. lug width of 0.26 in. [6.6 mm])</li><li>Torque to 6.3 in.lb (~0.7 N•m), max.</li></ul>
GMT output wire size	#22 AWG to #14 AWG, depending on output fuse rating
Grounding	
Earth GND terminal bolts (with washers) for dual-hole compression lug	<ul style="list-style-type: none"><li>Two pair of 1/4-20 threaded holes on 5/8 in. centers.</li><li>Torque bolts (using 7/16 in. or 12 mm wrench) to 50 in.-lb. (5.5 N•m), max.</li></ul>
Ground wire size	#6 AWG recommended
Communication	
nrgNET sensor and alarm card power	-48 VDC nominal
nrgNET data communication	RS-485
nrgNET connector	Removable 5-pin connector with screw down terminals
nrgNET connector functions	nrgNET IN from the nrgCONTROL or nrgSMART panel, nrgNET OUT to next in-line nrgSMART panel
Supported protocols	Proprietary nrgNET used to communicate between panels and controller
Voltage Sensor	
Sensor accuracy	0 to -19.99V: ±0.3V -20V to -60V: ±0.1V
Voltage measurement range	0 to -60 VDC
Feed voltage detection	0 to -19.99V: Alarm -20V to -60V: Normal
<b>NOTE:</b> <ul style="list-style-type: none"><li>Voltage measurement may be slightly different than at input terminal blocks due to the voltage drop within the panel.</li><li>Sensors are factory calibrated and do not require user adjustment</li></ul>	

GMT Sensor			
Max. GMT output fuse (ea.)	20A		
Max. GMT output load (ea.) - continuous	14A		
Minimum short circuit interrupt rating	450A		
Measurement range	0A to 30A		
Current measurement accuracy	<b>Current Range</b>	<b>Specs</b>	<b>Relative Accuracy</b>
	< 7A	± 2% of measured value	± .1A
	≥ 7A	± 4% of measured value	± .1A
	ex. 6A value results in .12A ± .1A = .02 -.22A accuracy		
Response time	1 sec		
Sample rate	1 sec minimum		
Dry Contact Alarms			
Alarm wire size	#22 to #18 AWG		
Alarm terminals	Wire wrap		
Relay contact ratings	Dry Form-C contacts (1A @ 30 VDC, 0.5A @ 60 VDC, 0.3A @ 125 VAC)		
Max. alarm power rating	@24V: 72 mA (1.73W) @48V: 147 mA (7.06W)		
Mechanical			
Dimensions	9" D x 17" W x 1.73" H (229 mm x 432 mm x 44 mm)		
Weight	Installed: 9 lbs. (4 kg) Shipping: 11 lbs. (5 kg)		
Color and finish	Pewter grey powder coat		
Mounting	19" or 23"		
Environmental			
Temperature	-5° to +55°C		
Humidity	0 to 90%, non-condensing		
Warranty			
• Standard 1 year warranty on all parts			

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## Ordering Information

Part Number	Description
<b>nrgCONTROL Parts</b>	
nrgCONTROL-BT	nrgSMART: CONTROLLER
143142	TERM BLOCK: RCPT, 1x4, 300V, 15A, 5.08 mm, MTG SCRW, 30-12AWG, ROHS
<b>nrg100GMT10-M</b>	
nrg100GMT10-M	nrgSMART: PANEL, 100A DUAL 10/10 GMT, 1RU, -48V, WITH nrgGMT
nrg100GMT10	nrgSMART: PANEL, 100A DUAL 10/10 GMT, 1RU, -48V, UN-POPULATED
306336	nrgSMART: AUX, ALARM CARD FOR GMT, -48V
nrgGMT	nrgSMART: MOD, GMT, CURRENT SENSOR, -48V
GMT-BLANK	nrgSMART: MOD, GMT, BLANK FACEPLATE
<b>GMT Accessories</b>	
nrgTEMP	nrgSMART: ACC, TEMP SENSOR, 6FT
06102B01+B7	RK MTG BRKT LT 19" 1" TAB WITH UNIVERSAL MT SLOTS, PWTR
06102B02+B7	RK MTG BRKT RT 19" 1" TAB WITH UNIVERSAL MT SLOTS, PWTR
06102B03+B7	RK MTG BRKT LT 23" 3" TAB WITH UNIVERSAL MT SLOTS, PWTR
06102B04+B7	RK MTG BRKT RT 23" 3" TAB WITH UNIVERSAL MT SLOTS, PWTR
<b>System Level Components</b>	
nrgNET-500	nrgSMART: ACC, nrgNET CABLE, SPOOL, 500FT
nrgNET-10	nrgSMART: ACC, nrgNET CABLE, UN-TERMINATED, 10FT
141431	TERM BLOCK: RCPT, 1x5, 160V, 8A, 3.81 mm, 30-16AWG, ROHS