

## GRID MONITORING RELAY

GMR product line of INOTEL products consists of Loss of Mains relays. As the leading product, GMR100, is a multi-function relay specifically developed for power plants and distribution substations in order to prevent islanding in the grid.

GMR100 monitors the grid live in terms of voltage and frequency. In case of a change in voltage or frequency beyond the limits set by the user, the relay disconnects the facility from the grid to secure anti-islanding. As soon as the grid parameters are back to the nominal values, GMR100 connects the facility back to the grid.

## GMR100



### GENERAL

Operation Temperature	-25°C...+60°C
Protection Class	IP30
Mounting	DIN Rail
Nominal Voltage	18 – 36 Vdc

### DIMENSIONS AND WEIGHT

Height x Width x Depth	86x105x57mm
Weight	680 gr.

### MEASUREMENT RANGE

(L1, L2, L3 - N)	0 – 410 Vac
(L1, L2, L3)	0 – 580 Vac
(L - N)	0 – 410 Vac
Frequency	40 – 60 Hz

### CONNECTION INTERFACES

RS485	1 port galvanic isolation
Relay Output	2 ports 10A@230Vac
Analog Input	1 port 3 P-N voltage measurement 30-410 Vrms with 1% tolerance
Digital Input	4 ports 24 Vdc optical isolation

### PROTECTION FUNCTIONS

27U Undervoltage
59 Overvoltage
81U Under frequency
81O Over frequency
81R Rate of change of frequency (ROCOF)
BF Breaker failure
74TCS Trip circuit supervision
ARF Automatic Reclosure

### HMI TOUCH PAD AND LED INDICATORS

Screen	2.8" TFT-LCD touch panel
Menu	System, Alarm, Setup
Functions	Setting protection and communication parameters Real-time recording & monitoring alarms
LEDs	Power, communication, error and positions information

### CERTIFICATION

Compatibility	TS EN 61000-6-2:2019
	TS EN 61000-6-4:2020
	TS EN 50178:2003
	TS EN 60255:2014

### AREAS OF USE

Solar PV Plants
Industrial Facilities
Wind Power Plants
Hydroelectric Power Plants

