

## GridAdvisor optical sensors



### Description

Eaton's GridAdvisor optical medium-voltage and current sensor system utilizes a 100% "all optical" measurement platform for unparalleled accuracy and precision of both voltage and current across multiple voltage classes. Available in a variety of easy-to-install packages with a standardized interface, Eaton's optical sensors are the ideal solution to retrieve real-time site metrology and intelligence on today's electrical distribution system, substations and underground distribution locations.

A sensing solution includes the m410 optical processor to provide data analytics and communications to your SCADA system and up to four voltage and current sensors. For locations that require more than four sensors, Eaton's m410 processor offers a daisy-chain feature to increase the number of sensors.

**Table 1. Ordering guide**

Description	Product Code	Catalog Number						
Basic letters for GridAdvisor optical sensor system	GA							
Specify sensors 1, 2, 3, and 4 (Replace "XX")	GA	XX	XX	XX	XX			
<b>00</b> = None								
<b>10</b> = Eaton RP225, gridview combination voltage & current optical sensor, 4 kV to 25 kV voltage class, 20 ka amperage, linepost sensor*	RP225							
<b>11</b> = Eaton RP235, gridview combination voltage & current optical sensor, 4 kV to 35 kV voltage class, 20 ka amperage, linepost sensor*	RP235							
<b>30</b> = Eaton RG235, gridview combination voltage & current optical sensor, 4 kV to 35 kv voltage class, 20 ka amperage, substation grade, line-hanging sensor	RG235							
<b>40</b> = Eaton RE120, gridview voltage only optical sensor, 200a amperage class, dead-break elbow sensor	RE120							
<b>41</b> = Eaton REC220, gridview combination voltage and current optical sensor, 200a amperage class, dead-break elbow sensor, current busbar ring sensor*	REC220							
<b>50</b> = Eaton RI125, gridview voltage only optical sensor, 4kV to 25kV voltage class, standoff insulator sensor	RI125							
<b>51</b> = Eaton RIC225, gridview combination voltage and current optical sensor, 4 kV to 35 kV voltage class, 20 ka amperage, standoff insulator sensor, current busbar sensor*	RIC225							
<b>90</b> = Eaton filler cartridge, modular optical sensor platform, 1 bay filler cartridge	FILL							
Specify system optical processor (Replace "X")	GA	XX	XX	XX	XX	X		
<b>A</b> = None								
<b>B</b> = Eaton m410, modular optical sensor platform, 4 bay modular chassis	M410							
Specify enclosure lists (Replace "X")	GA	XX	XX	XX	XX	X	X	
<b>0</b> = None								
<b>1</b> = TBD								
<b>2</b> = TBD								
<b>3</b> = TBD								
<b>4</b> = Eaton ENCL4 NEMA 4 enclosure, outdoor rated protection, standard configuration	ENCL4							
<b>5</b> = Eaton ENCL4X NEMA 4X enclosure, corrosion rated protection, standard configuration	ENCL4X							
<b>6</b> = Eaton ENCL6P NEMA 6P enclosure, limited submersion rated protection, standard configuration	ENCL6P							
<b>7</b> = Eaton ENCLCUST enclosure, customer defined specification, custom configuration	ENCLCUST							
Engineered to order (ETO) ("XXXX")	GA	XX	XX	XX	XX	X	X	XXXX
Radio ("XX")	GA	XX	XX	XX	XX	X	X	XXXX XX

\* Under development

**Note 1:** When purchasing an m410 with sensors, filler modules are required in unused sensor locations.

**Note 2:** Customers must provide requirements for custom enclosure. Contact your Eaton sales representative.

**Note 3:** ETO number and radio numbers are completed by Eaton factory.

**Note 4:** Contact Eaton for radio options.

## Available products



Figure 1. RG235



Figure 2. m410



Figure 3. m410 filler module



Figure 4. RE120



Figure 5. RI125

Table 2. Product references

Name	Description	For more information, reference document number:
m410	GridAdvisor optical system processor	PA9100007EN
Rg235	GridAdvisor optical hanging overhead voltage and current sensor, 4–35kV	PA9100003EN
Re120	GridAdvisor optical deadbreak elbow voltage sensor, 200A	PA910002EN
Ri125	GridAdvisor optical standoff insulator voltage sensor, 4–25kV	PA9100004EN
FILL	m410 Filler Module	

## Additional options

Table 3. Settings files

Description	Catalog Number
Customer provided settings file*	CUSTOMCONFIG-GP
Default factory settings file**	DEFAULTSETTNG-GP

\* Settings file name must be supplied.

\*\* If no settings file name is supplied, Eaton will install the current default settings file.

Table 4. Firmware

Description	Catalog Number
Specified firmware version*	CUSTOMCFW-GP
Default currently publicly released firmware**	DEFAULTFW-GP

\* Firmware version number must be supplied.

\*\* If no firmware versions are specified, Eaton will install the most current publicly released firmware.

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