

# Lighting Automation with *Astro*<sup>®</sup> using GSM Technology

- Most of the "ASTRO" parameters can be set remotely using SMS queries. I.e. Output mode, Offset Hrs etc, UV, OV settings.
- Relay Output can be override remotely using SMS query.
- Energy Meter Functionality. Parameter like Load current, Supply voltage, Power, Energy can be known remotely.
- With the help of "Auto Error Code Update" following onsite error can be known remotely during output event.
  - Under Voltage
  - Over Voltage
  - Over Current
  - Output actuator short.
  - Load Open



## Ordering Information

Cat. No.	Description
19D2000C	Surge Suppressor
19D20B00	Astro GSM Module (GSM-ERT5), Remote Side
19A1000B	Communication Cable (TTL-TTL) between Astro & GSM Module
TGDDT6	Windows based application software for Astro

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Cat. No.	19D20B00 (ERT 5)
<b>Parameters</b>	
Supply Voltage (ϕ)	240 VAC (3 Phase, 4 Wire)
Supply Variation	-30% to +25% (of ϕ)
Frequency	50/60 Hz
Active Phase selection	Yes
Operating Temperature	-15°C to + 60°C
GSM Type	Dual band 900 / 1800 GSM
GPRS Packet data	Class 10 coding scheme
AT cCommand set Suitability	N. A.
SMS Type Functionality	Data Call through GSM, SMS
SIM Holder	Text, Cell Broadcast
Antenna	Connected with the product
Antenna Impedance	50 Ω
Energy Measurement	Yes
Energy Measurement Accuracy	Class 0.5
Current Sensing Range	5A
CT Ratio	Settable up to 40
LED Indications	Tx, Rx, Network, Power, Pulse Out
Pulse Out rate	3200 pulses / kWh
Auxiliary Output	12 V DC, 200 mA
Mounting	Base / DIN Rail
Enclosure	Flame Retardant UL94-V0
Dimension (W x H x D) (in mm)	72 X 90 X 67
Weight (unpacked)	190 g
Certification	 

## EMI / EMC

Harmonic Current Emissions	IEC 61000-3-2
ESD	IEC 61000-4-2
Radiated Susceptibility	IEC 61000-4-3
Electrical Fast Transients	IEC 61000-4-4
Surges	IEC 61000-4-5
Conducted Susceptibility	IEC 61000-4-6
Voltage Dips & Interruptions (AC)	IEC 61000-4-11
Conducted Emission	CISPR 14-1
Radiated Emission	CISPR 14-1

## Environmental

Cold Heat	IEC 60068-2-1
Dry Heat	IEC 60068-2-2
Vibration	IEC 60068-2-6
Repetitive Shock	IEC 60068-2-27
Non-Repetitive Shock	IEC 60068-2-27

## Note:

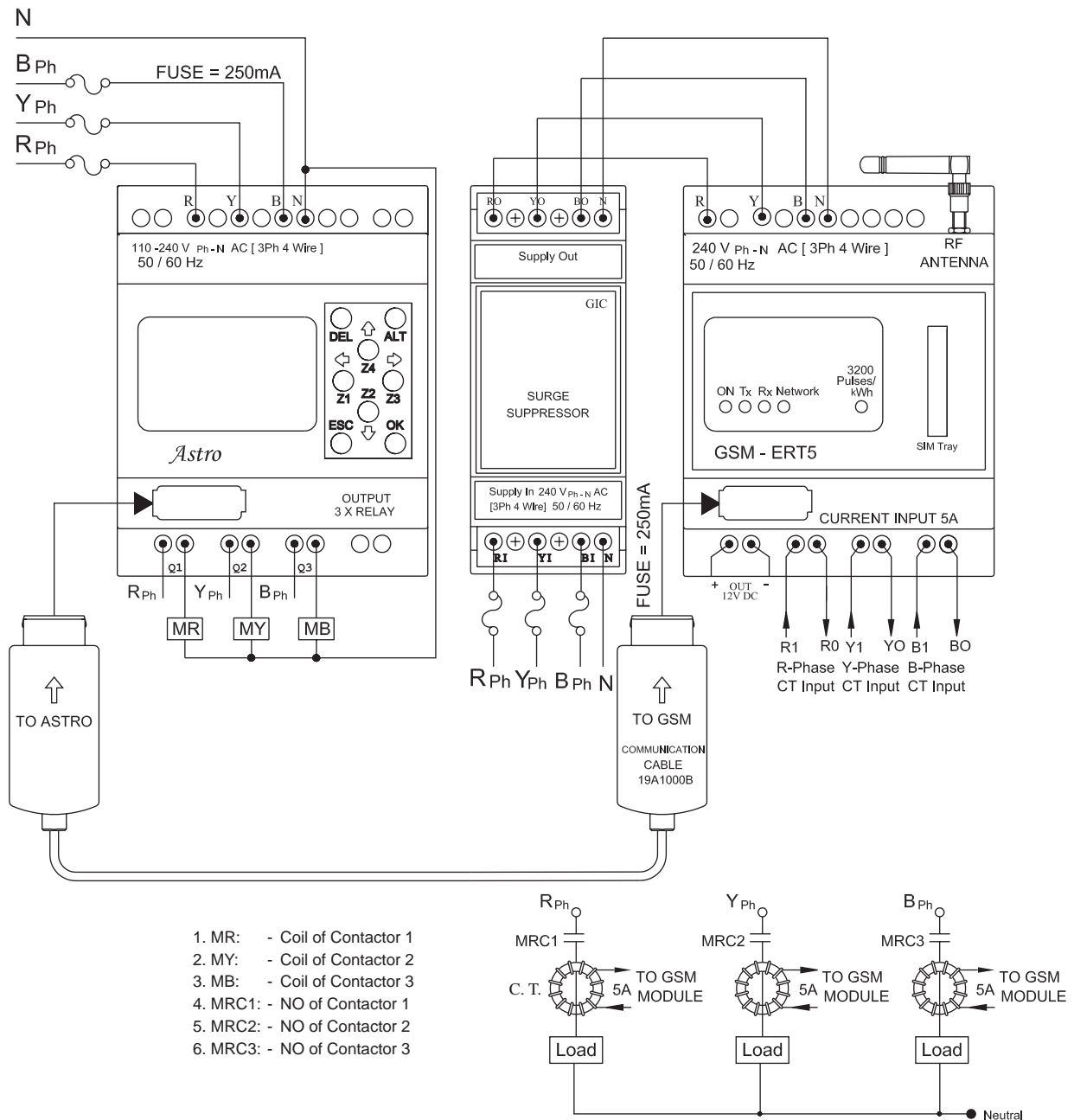
- ERT5 can measure maximum 5A & 1A current respectively.
- Maximum current measurement limit for ERT-5 is 200A.  
Ex: 1. For CT selection if current required to be measured is upto 200A then CT of 200:5 A ( CT ratio 40) needs to be used.





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- Maximum 5 valid users can access the system remotely, using GSM functionality.
- To avoid Remote module's SIM theft, "SIM PIN" facility can be enabled remotely using SMS query.
- To avoid changes in system configuration by unauthorized user amongst valid users, important SMS queries are provided with "MODULE PIN" lock.
- Device supports for 12 to 14 digit mobile number. i.e. (10 Digit Mobile number + 2/3/4 digit country code).

## CONNECTION DIAGRAM



## TERMINAL TORQUE & CAPACITY

 Ø 3.5...5.0 mm	Torque - 1.1 N.m (10 Lb.in) Terminal screw - M3.5
	Solid Wire - 2 X 0.2...2.5 mm <sup>2</sup>
AWG	1 X 24 to 10