



C320CT

General Overview

The **Concentrator - C320CT** is a vital part of AMR (Automatic Meter Reading) system. The concentrator performs communication between the control center and the electricity meters.

The **Concentrator** is a central unit for remote reading, processing and controlling of electricity meters. It communicates with the meters over the low voltage power network, using two way Power Line Communication (PLC).

The **Concentrator** communicates with the control center using the cellular network – GSM/GPRS, transferring periodical reports.

The **Concentrator** can also operate as a three phase meter for measurement of the substation voltage, output power and accumulated energy consumed.

The **Concentrator** is a wall mounted central unit installed on the low voltage side of the transformer.

Features:

- ✓ Two way communication access to all units.
- ✓ Can control up to 400 units.
- ✓ Indicates the electricity phase associated with every consumer.
- ✓ Optional software application packages, such as:
 - ✓ Load control programs.
 - ✓ Prepayment schemes.
- ✓ Powered by any combination of the three power line phases.
- ✓ Reports the power loading of each of the three phases.
- ✓ Reports the voltage on each of the three phases.
- ✓ Reports the total consumption drawn from each of the three phases.
- ✓ Keeps the reports of the last ten power failures.
- ✓ Real time recovery synchronization from the cellular network.
- ✓ Accumulates 24 hour load curves for all the meters.
- ✓ Sends periodical reading report and load curves to an email box.
- ✓ Informs immediately on a power failure by an SMS.
- ✓ Handles TOU & STS prepayment schemes.
- ✓ Remote download of the operating program and tariff tables.
- ✓ Easily installed at any convenient location in the low voltage network.
- ✓ Also functions as a stand alone Three-Phase electricity meter.



Technical Specifications

General	
Nominal Voltage (Un)	3 x 230 (400)V AC
Supply Voltage range	80% - 115% Un
Nominal Frequency (fn)	50Hz
Consumption at Un	5 W – 4.1 Var (Capacitive)
System connection	3 phase 4 wire
Measurement	
Class Index	
Class energy according to IEC62053-21	Class 2 (designed for Class 1)
Class energy according to IEC62053-23	Class 2
Basic Current (Ib)	3x5A
Maximum continuous current (Imax)	3x20A
Environmental	
Temperature range	
operation	-15°C to 65°C
storage	-25°C to 70°C
Insulation Strength	
Protective Class acc. to IEC62052-11	Class I I
Display	
Type	LCD
Format	16 Characters x 2 Lines
Character size	9.55mm x 5.2mm
LED Indicator	
Flash rate	200 imp/kWh
Communication Interfaces	
Cellular	Quad band GSM 850/900/1800/1900 MHz
PLC Frequency range	A-band 60-90 kHz



Technical Specifications

Weight/External Dimensions	
Weight	1300 g
Width	145 mm
Height	228 mm
Depth	80 mm
Enclosure protection (IEC60529)	IP51

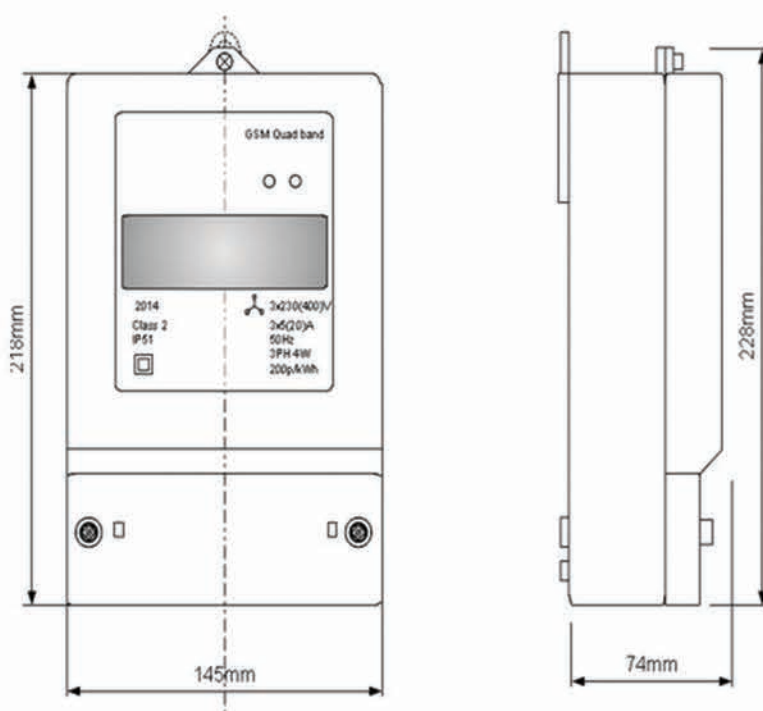
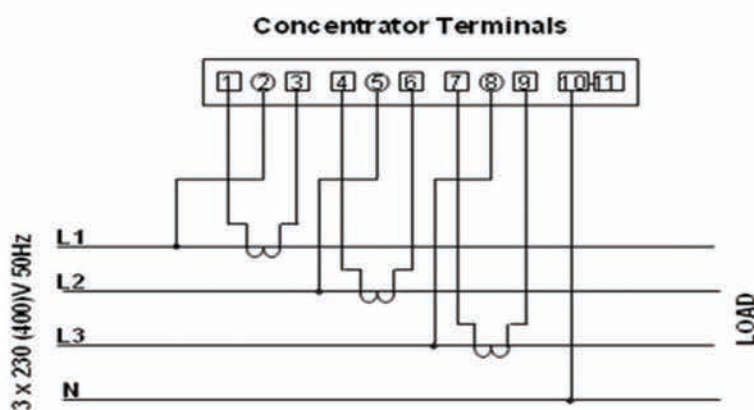


Fig. 2.Meter Dimensions

Connection Diagram





Connection Diagram

