



Medidor Eléctrico SenNet para Submetering

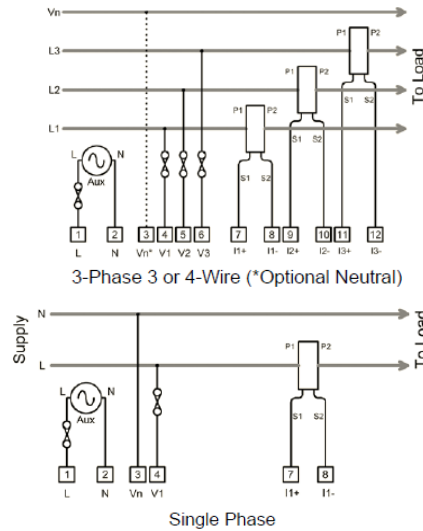
Medidor / Analizador eléctrico trifásico / monofásico para aplicaciones de submetering

El medidor eléctrico **SenNet** es un equipo diseñado para aplicaciones de submetering tanto para conexiones trifásicas como monofásicas con precisión mejor que clase 1.

De pequeño tamaño y formato de fijación a carril DIN, con display y teclado es idóneo para su integración en cuadros principales y secundarios.



A continuación se indica un diagrama de conexión para trifásico o monofásico:



El display y teclado integrado facilita la medida directa y las comunicaciones a través de **MODBUS RTU** mediante conexión RS485 permiten integrar el equipo con el datalogger **SenNet Optimal** o con un PC a través de **cable o radio** mediante nuestros radiomodem.

El equipo mide para cada fase potencias, energías (importadas/exportadas, activas/reactivas), tensiones, intensidades, frecuencia, factor de potencia, armónicos hasta el 15º, etc.

Para la captura de las intensidades utiliza sondas de núcleo abierto desde 5A hasta 800A de alta precisión y muy fácil instalación.



INPUTS	
System	3 Phase 3 or 4 Wire Unbalanced Load
Voltage Un	400/230V. 3 Phase 3 or 4 Wire 110/63V, 120/240V & 208/120V optional. Others to order.
Current Sensors	
Output @ Nominal In	0.333Vac
Accuracy	±1% (0.1In – 1.2In)
ND SCL8-5	In = 5A; Max Cable = 8mm Dia. Phase Error <2.5° at 0.5In
ND SCL16-50	In = 50A; Max Cable = 16mm Dia. Phase Error <2.5° at 0.5In
ND SCL16-100	In = 100A Max Cable = 16mm Dia. Phase Error <2° at 0.5In
ND SCT19-150	In = 150A Max Cable = 19mm Dia. Phase Error <2° at 0.5In
ND SCT32-400	In = 400A; Max Cable = 32mm Dia. Phase Error <2° at 0.5In
ND SCT51-800	In = 800A; Max Cable = 51mm Dia. Phase Error <2° at 0.5In
Enclosures	UL94V-0
Insulation	>300Vrms, CAT III
Environment	Indoor use only (Altitude < 2000m)
Measurement Range	Voltage 50% to 120% Current 0.2% to 120%



Frequency Range	Fundamental 45 to 65Hz Harmonics Up to 30th harmonic at 50Hz Individual to the 15th
Voltage Burden	<0.1VA per phase
Overload	Voltage x4 for 1 hour Current SCL x10 for 1min SCT19 200A Continuous SCT32 800A Continuous SCT51 2000A Continuous
DISPLAY	
Type	Custom, Supertwist, LCD with LED backlight
Data Retention	10 years min. Stores kWh & Meter set-up
Format	8 x 6.66mm high digits with DPs & 3.2mm legends
Scaling	Direct reading. User programmable CT & VT CT Primary programmable from 5A to 25kA VT primary programmable from 11V to 55kV
Legends	Wh, kWh, MWh etc. depending on user settings
AUXILIARY SUPPLY	
Standard	230V 50/60 Hz $\pm 15\%$
Options	110V 50/60 Hz $\pm 15\%$
Load	2VA max.
Overload	x1.2 continuous
METER ACCURACY All errors ± 1 digit	
kWh	Better than Class 1 per EN 62053-21 & BS 8431
Kvarh	Better than Class 2 per EN 62053-23 & BS 8431
kW & kVA	Better than Class 0.25 IEC 60688
kvar	Better than Class 0.5 IEC 60688
Amps & Volts	Class 0.1 IEC 60688 (0.01In – 1.2In or 0.1Un – 1.2Un)
PF	$\pm 0.2^\circ$ (0.05In – 1.2In and 0.2Un – 1.2Un)
Neutral Current	Class 0.5 IEC 60688 (0.05In – 1.2In)
OVERALL METERING ACCURACY	
ND SCL8-5	5 Amp Better than Class 2 Meter with Class 1 CTs
ND SCL16-50	50 Amp Better than Class 1 Meter with Class 1 CTs
ND SCL16-100	100 Amp Better than Class 1 Meter with Class 1 CTs
ND SCT19-150	150 Amp Better than Class 1 Meter with Class 1 CTs
ND SCT32-400	400 Amp Better than Class 1 Meter with Class 1 CTs
ND SCT51-800	800 Amp Better than Class 1 Meter with Class 1 CTs
PULSE OUTPUTS	
Function	1 Pulse per unit of energy
Scaling	Settable between 1 & 1000 counts of kWh register
Pulse Period	0.1 sec. default; Settable between 0.1 and 20 sec
Rise & Fall Time	< 2.0ms
Type	N/O Volt free contact. Optically isolated BIFET
Contacts	100mA ac/dc max., 100V ac/dc max.
Isolation	2.5kV 50Hz 1 minute
MODBUS® Serial Comms	
Bus Type	RS485 2 wire + 0v. ½ Duplex, ¼ unit load
Protocol	MODBUS® RTU with 16 bit CRC
Baud Rate	4800, 9600 or 19,200 User settable
Address	1 – 247 User settable
Latency	Reply within 250ms max.
Command Rate	New command within 5ms of previous one
GENERAL	
Temperature	Operating -10°C to +65°C Storage -25°C to +70°C
Humidity	< 75% non-condensing
Environment	IP54 standard, IP65 optional
MECHANICAL	
Terminals	Rising Cage. 4mm ² (12 AWG) cable max.
Enclosure	DIN 43880, 6-Modules Wide
Material	Noryl® with fire protection to UL94-V-O. Self extinguishing
Dimensions	106 x 90 x 58mm (Cut out 106 x 45mm)
Weight	~ 250 gms
SAFETY	
Conforms to	EN 61010-1 Installation Category III & BS 8431