

ACE9000 Taurus SSP

Split Single-Phase Prepayment Electricity Meter

- ▶ **Compact CIU and standard BS footprint MIU**
- ▶ **20 Digit STS encryption**
- ▶ **Keypad with audible feedback**
- ▶ **Programmable low credit warning**
- ▶ **Adjustable power limit setting**
- ▶ **Maximum current of 80 A with Class 1 accuracy**
- ▶ **Recall of last five tokens entered.**
- ▶ **Tamper switch**
- ▶ **Isolated, two wire communication between MIU and CIU**
- ▶ **CIU LCD contains status of communication link to MIU**
- ▶ **150m operating distance between MIU and CIU**



▶ **ACE9000 Taurus SSP (MIU)**



▶ **ACE9000 Taurus SSP (CIU)**

Based on the successful ACE9000 Taurus ISP meter, the ACE9000 Taurus SSP meter (Split Single-Phase prepayment meter) is a single-phase split prepayment meter in a British Standard (BS) housing.

The meter is suitable for new reticulation as well as for retrofitting of existing standard BS footprint credit meters. It can also be installed in standard pole mounted meter cabinets.

The ACE9000 Taurus SSP meter consists of two portions viz, the **Measurement Interface Unit (MIU)** and the **Customer Interface Unit (CIU)**.

MIU

The MIU consists of the measurement and control circuits as well as the disconnection device. The STS token decryption takes place at the MIU. The MIU is compact and has a standard BS5685 footprint for standardised mounting.

The MIU can be installed in a lockable metering cabinet located outside the consumers premises to allow inspection by utility field staff.

The MIU contains a LED consumption rate indicator and an LED showing the status of the contactor. If required an MIU with an LCD and keypad can also be used.

Tamper monitoring at MIU (Optional)

To prevent attempted fraud by the consumer the MIU operates independently from the CIU.

It also has a tamper switch located under the terminal cover which can be configured to operate in two modes:

- ▶ **Tamper disconnect:** The contactor will disconnect the load when the tamper switch is activated. (eg someone trying to remove the terminal cover)
- ▶ **Tamper logging:** the contactor will not disconnect but will log the tamper event by incrementing the TAMPER COUNT register.

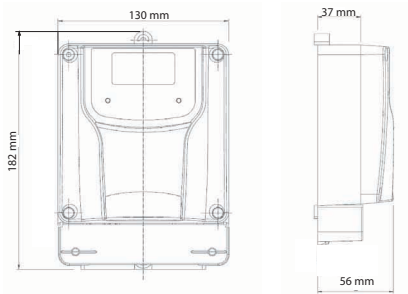
CIU

The CIU is installed in the consumers home and provides a convenient user interface for the customer. The CIU is linked to the MIU via a pair of polarised, galvanically isolated communication wires that operates over a distance of 150m.

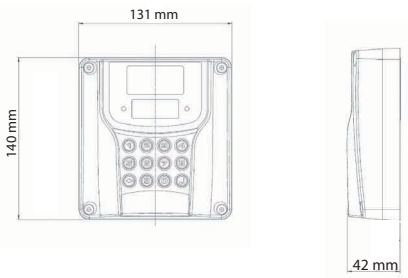
For ease of use the CIU consists of a user friendly LCD capable of showing various information to the consumer.

This includes amongst others the acceptance or rejection of tokens, the credit status, the instantaneous load consumption in kW, the status of the communication between the CIU and MIU and the ability to recall the last five successful credit tokens entered.

Should the credit drop below a specified threshold the consumer can be alerted visually and or audibly.



► ACE9000 Taurus SSP (MIU)



► ACE9000 Taurus SSP (CIU)



Technical Specifications

Parameter	Characteristic
Standards (MIU & CIU)	SABS 1524-1 MC 195 IEC 62052-11 & IEC 62053-21 compliant SCSSCAA9 (MC171) SCSSCAA1 TRMSCAAP2 RES/RR/00/11740 ESKASAAN2 NRS: 009-4-2; 009-6-6; 009-6-7; 009-6-9; 009-7
Meter Interface Unit (MIU)	
Rated voltage	220V, 230V, 240V (-20% + 15%)
Frequency	50Hz or 60Hz +/- 5Hz
Basic current (Ib)	10A or 20A
Maximum current (I _{max})	60A or 80A
Starting current	40mA
Maximum creep current	20mA
Accuracy	Class 2 (Class 1 optional)
Continuous voltage supply	Maximum: 265V Minimum: 184V
Maximum withstand voltage (48hr)	415V
RF immunity	16V/m
Power consumption	< 2W
Rate indicator	LED 1000 pulses/kWh
Disconnection device	Contactors
Installation	Standard BS 5685 mounting footprint
Terminal wiring	Symmetrical (BS) or asymmetrical (DIN)
Auxillary wiring to CIU	terminal accepting 2.5mm ² cable
Operating temperature range	-10°C to + 55°C
Limit temperature range of operation	-25°C to + 70°C
Humidity operating range	95% RH
IP rating	IP54
Meter weight	1.1 kg
Dimensions (L x W x H)	182 mm x 130 mm x 56 mm
Customer Interface Unit (CIU)	
User Interface	12 digit Keypad with audio feedback, 7 character, 7 segment LCD Low credit warning: display flashing
Rate indicator	LED 1000 pulses/kWh
Status indicator	LED power on
Communication circuitry	Polarised, galvanically isolated, 5V DC
Communication cable status indicator	Status indication on LCD
Weight	0.3 kg
Terminals (wiring to MIU)	Non-polarised terminal accepting 2.5mm ² cable
IP rating	IP51
Dimensions (L x W x H)	140mm x 131 mm x 42mm
Installation	Slimline wall mounted
Product Life	15 years