AccuRange® current transformers
High accuracy, extended range current transformers for more accurate revenue metering
AccuRange® current transformers
Delivering savings through improved accuracy metering and reduced inventory requirements

ABB’s AccuRange current transformer portfolio offers low and medium voltage high accuracy, extended range transformers for secondary and primary revenue metering applications.

Secondary revenue metering
AccuRange 600 V current transformers deliver high accuracy and stable performance over a wide load swing. Accuracy is guaranteed to exceed the IEEE 0.15S accuracy class of 0.15% from 5% of nominal current through rating factor.

CMV-S
The CMV-S current transformer is designed for pad-mounted distribution transformer metering on 600 V systems inside high ambient temperature environments up to 85°C, and can be mounted directly upon the energized busbar. A single 1000:5 ratio unit will meter at 0.15% accuracy from 10 A - 2000 A for extended range metering.

CBT-S
The CBT-S bar-type current transformer is designed for use in metering 600 volt circuits, typically installed inside of a transsocket. Applicable to single or polyphase low voltage circuits, a single 600:5 ratio unit will meter at 0.15% accuracy from 6 A - 1200 A for extended range metering.

CMF-S
The CMF-S is used with watt-hour meters, with or without thermal demand attachments. Applicable to single or polyphase low voltage circuits, a single 600:5 ratio unit will meter at 0.15% accuracy from 6 A - 1200 A for extended range metering.

CLC-S
The CLC-S current transformer is designed for high current metering on low voltage systems and is available in single or dual ratios. It can be used with uninsulated bus bar or cable up to 600 volts, or with insulated primary conductors at higher voltages. A single 2000:5 ratio unit will meter at 0.15% accuracy from 20 A - 5000 A for extended range metering.

Primary revenue metering
Outdoor current transformers
The KON-11ER, KOR-15CER, and KOR-20ER high accuracy, extended range outdoor current transformers are specifically designed for primary metering on outdoor 15, 25, and 34.5 kV systems. Designed to exceed the 0.15S class, these CTs have a range of 1% through rating factor which makes them ideal for variable load applications, as well as applications that have extended periods of very low current levels. The 34.5 kV units are especially well suited for variable load renewable energy applications.

CVC-110ER
The CVC-110ER is a combination unit that consists of a current transformer and voltage transformer in one housing. It is designed for metering applications and can be pole-mounted or used in substations. The combined unit provides the customer with both cost and space savings, as well as reduced installation time.

The current transformer element is highly accurate and ideal for use in cogeneration and in applications where there are large power exchanges, as it preserves stated accuracies with loads ranging from 1% of the full rated current through the rating factor. Due to its wide operating range in conventional metering applications, the CVC-110ER provides greater value for the utility customer by reducing inventory requirements.
Substation metering

**PS-981/PH-982**
The PS-981/PH-982 outdoor “slip-over” ACCUSlip™ CTs are 600 volt, 10 kV BIL rated units designed to fit over a variety of specified bushing sizes on power transformers, circuit breakers, or cable terminators (potheads). These units can be applied over higher rated system voltages, provided sufficient insulation is available on the point of application.

Primary current ratios are available from 50:5 to 5000:5 with a rating factor of up to 4.0. These units are ideal for use in older electrical substation equipment with no internal space for bushing current transformers (BCTs). Utilities can recognize a substantial cost savings in both initial price, as well as cost of installation, using a slip-over CT. Window sizes range from 6” to 46” and many of these dry-type, solid-cast CTs exceed the 0.15S metering class. These slip-over units can also be supplied with relay class accuracy for protection schemes.

**LGX series**
The LGX series of CTs measures loads as low as 1% of nominal current, exceeding the 0.15S metering standard for accuracy. The LGX series is available for 15 kV, 25 kV, and 35 kV classes. These units are a favorite of wind farm collector substations as well as other variable load, renewable energy applications because of their ability to extend from very low to very high current levels. Window and bar-type designs are available for substation applications.

Generation metering

**Generator current transformers**
The indoor/outdoor GCT-848 (board-mounted) and PSG-981 (solid cast) generator current transformers are 600 volt, 10 kV BIL rated units designed to fit over a wide range of primary conductors. The insulation of the primary provides the dielectric protection for the CT.

Primary current ratios are available up to 50000:5 (as well as up to 25000:1) at 50 and/or 60 Hertz (Hz) to meet IEC and IEEE standards with a typical rating factor of 1.0 @ 55°C. These units are ideal for new installations or for quick replacement/retrofit on older generators. Both can operate exceeding the IEEE 0.15S metering class for metering and can also be designed for relay applications.