



Material Solutions for Smart Meters

Expertise/Closeness/Innovation



Gas Meter



Water Meter



Electric Meter



Electric Meter

The smart meter market, encompassing electric, water, and gas sectors, is pivotal in shaping a sustainable and connected future. As these meters become integral to our utilities, they face multifaceted challenges. From fluctuating environmental conditions to potential electronic interference, the reliability and accuracy of these devices are paramount. Their resilience not only ensures accurate billing but also plays a role in resource conservation and efficient energy management.

With a rich legacy of pioneering solutions, ELANTAS PDG is at the forefront of developing exceptional conformal coatings and potting solutions tailored for the smart meter market. Our advanced materials are designed to encapsulate and protect electronic components, defending them from moisture, contaminants, and the rigors of daily operations. This ensures that smart meters, whether monitoring electric currents, water flow, or gas consumption, deliver precise readings consistently.

Beyond protection, our offerings are crafted with the diverse needs of the utility sectors in mind. Our coatings and potting materials ensure longevity, adaptability, and resilience for end-use applications. Whether it's a meter installed in a humid coastal area, a bustling urban setting, or a remote rural location, ELANTAS PDG ensures it remains uncompromised and efficient.

In an era where every watt, drop, and cubic foot counts, ELANTAS PDG stands as a beacon of trust and innovation. We're committed to fortifying the backbone of our utility infrastructure, ensuring that as the world becomes smarter, it also becomes more reliable. Together, let's measure the future of smart meter solutions.

Potting Material Properties**

Product	Chemistry	Curing Mechanism	Mix Ratio (by weight / by volume)	Mixed Viscosity	Shore Hardness	Worklife	UL Flame Class
Conathane® EN-21	Polyurethane	RT/HEAT	100:116 100:137	2,000 cP	A80	40 min	HB@0.84 mm
Conathane® EN-107	Polyurethane	RT/HEAT	100:43 100:40	6,000 cP	A95	45 min	–
Conathane® EN-2523	Polyurethane	RT/HEAT	20:100 24:100	2,800 cP	D50	50 min	HB@1.5 mm
Conathane® EN-5317	Polyurethane	RT/HEAT	100:97 100:100	300 cP	A70	15 min	–
CONAP® EN-5852	Polyurethane	RT/HEAT	20:100 25:100	8,500 cP	A85	30 min	V-0@2.8 mm

** Values provided are typical and can vary pending application and processing conditions

Conformal Coating Material Properties**

Product	Chemistry	Curing Mechanism	No. of Components	% Solids	Viscosity	Tack Free Time	UL Flame Class
Conathane® CE-1170	Acrylic	RT/HEAT	1	30 %	400 cP	15 min	V-0@1 mil
CONAP® CE-2280-1	Urethane-Alkyd	RT/HEAT	1	45 %	< 500 cP	15 min	V-1@1 mil

** Values provided are typical and can vary pending application and processing conditions

ELANTAS is a global supplier of materials for the electric and electronic industry, including:

Conformal Coating

Bectron®, CONAP®, Conathane®
Acrylic/Epoxy/Polyurethane/Polyurethane –
Alkyd/Polyurethane – Acrylate/Silicone
1K/2K/UV & Heat Cure/UV & Moisture Cure/Heat
Cure/Moisture Cure/Air Dry

Potting & Casting

Bectron®, CONAP®, Conapoxy®, Conashield™, Conathane®
Epoxy/Polyolefine/Polybutadiene/Polyurethane/Silicone
1K/2K/Heat Cure/Moisture Cure/RT Cure

Encapsulation

Bectron®, Conashield™, Conathane®
Polyolefin /Polyurethane/Polyurethane –
Acrylate/Silicone
1K/2K/UV & Moisture Cure/Heat Cure/Moisture Cure

ELANTAS is part of the ALTANA group and is a leading manufacturer of insulating and protecting materials for the electrical and electronics industry. Our portfolio includes wire enamels, impregnating resins and varnishes, flexible electrical insulation materials, casting & potting resins for motors, generators and transformers, as well as conformal coatings for protecting PCBs, modules, or sensors. In addition, we offer a wide range of adhesives, as well as materials for printed electronics.

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