

# 2Grid CommPack GM4 & GMX

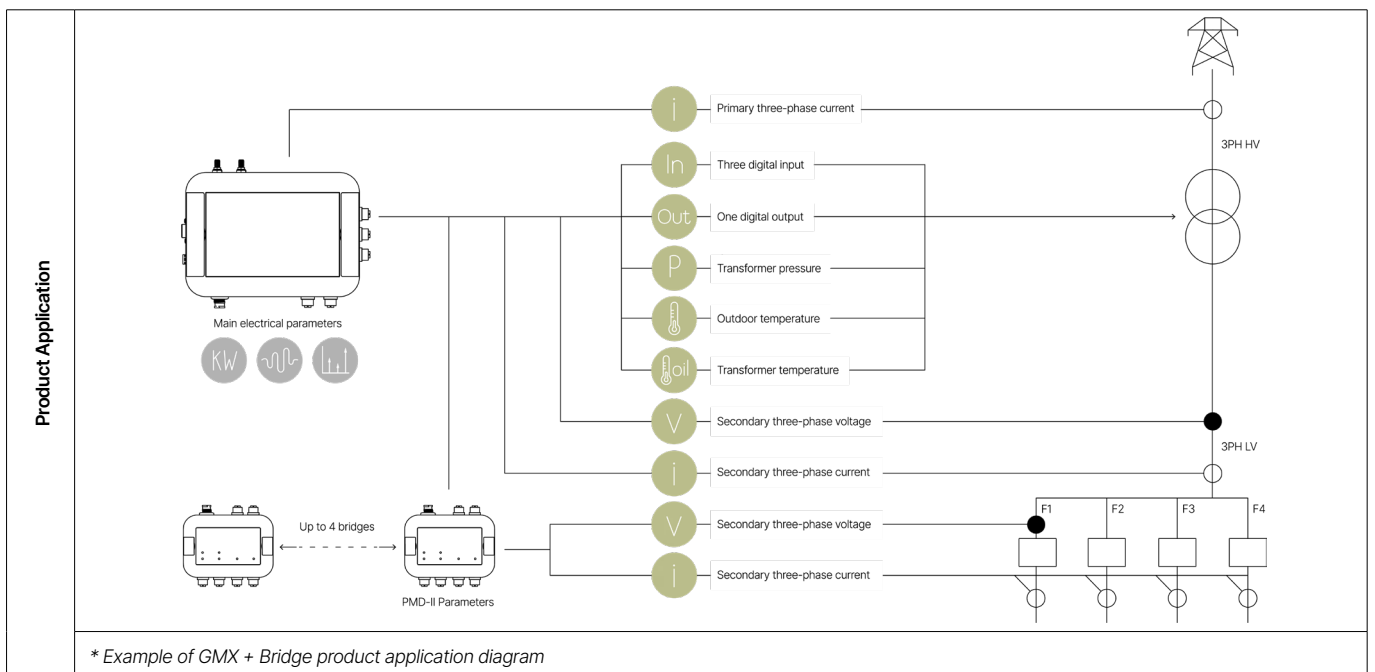
## Scalable and advanced monitoring for LV substations

2Grid CommPack GM monitoring units are purpose-built for ground-mounted secondary substations. Compact, rugged, and fully outdoor-ready, they combine self-powering capability with native LTE/Ethernet connectivity to provide real-time visibility of both feeders and transformer conditions. With seamless integration into ADMX systems, they enhance preventive maintenance, fault detection, and overall operational awareness.

The GM series covers configurations from four three-phase current inputs (GM4) up to expandable architectures with up to 18 inputs (GMX + Bridge), adapting to the specific needs of each DSO and ensuring reliable, future-proof digitalization of LV grids.

Among other functions it includes:

- Comprehensive feeder and transformer monitoring for 360° substation visibility.
- Built-in LTE connectivity and self-powering from phases for easy installation.
- Scalable architecture, from GM4 to GMX + Bridge, tailored to any substation size.



2Grid CommPack GM4 & GMX Technical Specifications Chart	
<b>Metrics and Calculations</b>	Primary & secondary three-phase current measurement (up to 18 three-phase current measurement adding bridge accessories)
	Neutral current measurement: direct, calculated and homopolar
	Three-phase secondary voltage measurement
	Derived electrical magnitudes calculation: power, power factor, cosΦ, active/reactive/apparent power, quadrant-based active energy, symmetrical components, frequency
	Total harmonic distortion (THD) calculation up to the 41st harmonic (21st odd)
	Electrical parameter logging
	Digital I/O
	Oil temperature and pressure measurement or transformer chasis temperature

Safety Features	High cybersecurity standards			
	Encrypted communication protocols: HTTPS (API/WEB), MQTTS, MODBUS TCP TLS, MODBUS RTU (Master)			
	Ratings of insulation of external circuits	Power supply CAT IV 300V / Other ports CAT IV 150V		
	Overtoltage category	CAT IV 300V		
	Pollution degree	PD2		
	Degree of ingress protection (IEC 60529)	IP65 and IP67		
	Configurable alarms: Overload, short circuit, power failure, oil pressure & temperature, external temperature, digital I/O alarms, user-defined alarms			
Environmental and Installation Conditions	Installation location	Outdoor		
	Altitude	2000 m		
	Temperature	-20°C up to +55°C		
	Relative humidity	0% up to 97%		
	Main supply voltage fluctuations	View supply voltage range		
Device Features	IP67-rated outdoor protection			
	Quick and easy installation with pre-wired connectors			
	Custom factory configuration option			
	Supply voltage	90...480V AC		
	Frecuency	50/60 Hz		
	Power rating	12 VA		
	Description of all inputs and outputs	1 x 3PH Power supply and voltage measurement / 1 x 3 Digital inputs + 1 digital output / 1 x Analog sensors interface / 1 x Ethernet port / 1 x GNSS Antenna / 1 x LTE Antenna / <b>GM4</b> : 4 x 3PH Current metrology / <b>GMX</b> : 2 x 3PH Current metrology / 1 x Bridge interface (RS485)		
	Dimensions (mm)		2Grid Commpack GM4 & GMX	Bridge
		A	227,9	130
		B	178,8	117,2
C		55	39,9	
Weight (kg)	0,8			
Comms & logging	4G-LTE mobile communication			
	Internal web server for monitoring & configuration			
	Event logging & statistical data storage			

Measurements Table	2Grid CommPack GM4 & GMX	Bridge
	<p>* Yellow inputs: two additional three-phase current inputs (for GM4 model).</p> <p>* Green input: one additional input for analog sensor interface (for GMX model).</p>	