

90 AM

GEWISS



GWD6821



L'installazione deve essere effettuata e verificata da uno specialista esperto. Togliere tensione prima di intervenire sull'apparecchio.

The installation must be performed and checked by an expert specialist. When working on the instrument, switch off the mains voltage!

L'installation doit être exécutée et vérifiée par un spécialiste expert. Couper la tension avant d'intervenir sur l'appareil.

La instalación debe ser efectuada y comprobada por un especialista experto. Antes de intervenir en el equipo hay que cortar la tensión.

Der Einbau muss von einem erfahrenen Spezialisten durchgeführt und überprüft werden. Bei Arbeiten am Meßgerät, Netzspannung abschalten!



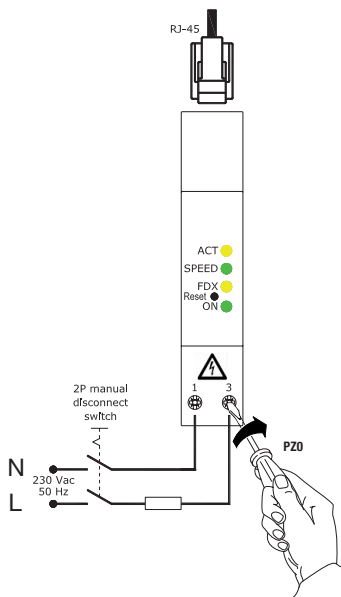
**Fusibile e sezionatore in accordo alla norma IEC 62368-1.
Fusibile a cartuccia 5x20 mm, Certificato secondo la norma IEC 60127-2.
Corrente nominale 125 mA.
Tensione massima 250 Vac.
Per esempio: Littelfuse 0218.125
La barra DIN sulla quale il contattore è montato deve essere collegato a terra.**

*Fuse and switch disconnecter in compliance with standard IEC 62368-1.
Cartridge fuse 5x20 mm, certified according to standard IEC 60127-2.
Rated current 125 mA.
Maximum voltage 250 Vac.
For example: Littelfuse 0218.125
The DIN rail on which the contactor is fit must be earthed.*

**Fusible et sectionneur conformément à la norme CEI 62368-1.
Fusible à cartouche 5x20 mm, certificat selon la norme CEI 60127-2.
Courant nominal 125 mA.
Tension maximale 250 Vac.
Par exemple : Littelfuse 0218.125
La barre DIN sur laquelle est monté le contacteur doit être raccordée à la terre.**

**Fusible y seccionador conformes con la norma CEI 62368-1.
Fusible de cartucho de 5x20 mm, certificado según la norma CEI 60127-2.
Intensidad nominal 125 mA.
Tensión máxima 250 Vca.
Por ejemplo: Littelfuse 0218.125
La barra DIN en la que está montado el contador debe estar conectada a tierra.**

**Sicherung und Lasttrennschalter entsprechen der Norm IEC 62368-1.
Patronensicherung 5x20 mm, Zertifiziert gemäß der Norm IEC 60127-2.
Bemessungsstrom 125 mA.
Höchstspannung 250 VAC.
Zum Beispiel: Littelfuse 0218.125.
Die DIN-Schiene, auf der der Zähler montiert wird, muss geerdet sein.**





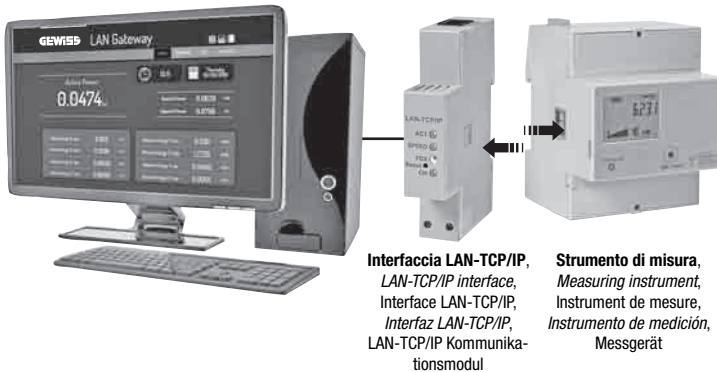
Un possibile schema del sistema è descritto sotto. In figura il LAN-Gateway è connesso al PC. Il LAN-Gateway può essere connesso anche ad una rete LAN esistente.

One possible scheme of the system is described below. In the picture the LAN-Gateway is connect to a PC. Instead, LAN-Gateway can be connected to LAN network.

Un possible schéma du système est décrit ci-dessous. Sur la figure, le LAN-Gateway est connecté à l'ordinateur. Le LAN-Gateway peut également être connecté à un réseau LAN existant.

A continuación se describe un posible esquema. En la figura el LAN-Gateway está conectado al PC. El LAN-Gateway también se puede conectar a una red LAN existente.

Die nachfolgende Skizze zeigt eine mögliche Systemkonfiguration. In dieser Konfiguration kommuniziert der LAN-Gateway mit einem PC. Der LAN-Gateway kann auch in vorhandene LAN-Netze eingebunden werden.



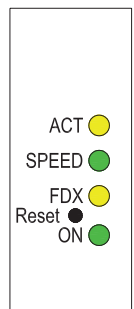
- **Indirizzo IP,** IP address, Adresse IP, Dirección IP, IP Adresse: 192.168.1.253
- **Subnet Mask:** 255.255.255.0
- **Gateway:** 192.168.1.1
- **DHCP OFF**
- **DNS primario,** Primary DNS, DNS primaire, DNS principal, Primäre DNS: 8.8.8.8
- **DNS secondario,** Secondary DNS, DNS secondaire, DNS secundario, Sekundäre DNS: 156.154.70.1
- **Credenziali di accesso,** Access credentials, Identifiants de connexion, Credenciales de acceso, Zugangsdaten:
 - Nome utente, Username, Nom utilisateur, Nombre del usuario, Anwender: admin
 - Password, Password, Mot de passe, Contraseña, Passwort: admin

• **ACT LED (giallo): Lampeggia quando c'è attività su LAN.** - ACT LED (yellow): Blinking means LAN activity. - VOYANT ACT (jaune): Clignote lorsqu'il y a de l'activité sur le LAN. - LED ACT (amarillo): Parpadea cuando hay actividad en la LAN. - ACT LED (gelb): Blinkt bei Aktivität auf LAN.

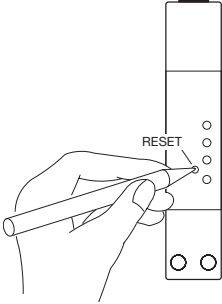
• **SPEED LED (verde): Il LED è ON se la LAN opera a 100 Mbit/s, è OFF se opera a 10 Mbit/s.** - SPEED LED (green): The LED is ON if the LAN is 100 Mbit/s, it's OFF if the LAN is 10 Mbit/s. - VOYANT SPEED (vert) : Le voyant est ON si le LAN fonctionne à 100 Mbit/s, il est OFF s'il fonctionne à 10 Mbit/s. - LED SPEED (verde): El LED está ON si la LAN está comunicando a 100 Mbit/s, está OFF si la LAN está comunicando a 10 Mbit/s. - SPEED LED (grün): Die LED ist ON, wenn das LAN mit 100 Mbit/s arbeitet, und OFF, wenn es mit 10 Mbit/s arbeitet.

• **FDX LED (giallo): Il LED è ON se la LAN opera full-duplex, è OFF se opera half-duplex.** - FDX LED (yellow): The LED is ON if the LAN is full-duplex, it's OFF if the LAN is half-duplex. - VOYANT FDX (jaune) : Le voyant est ON si le LAN fonctionne en full-duplex, il est OFF s'il fonctionne en half-duplex. - LED FDX (amarillo): El LED está ON si la LAN está comunicando en dúplex completo, está OFF si la LAN está comunicando en dúplex medio. - FDX LED (gelb): Die LED ist ON, wenn das LAN in Voll-duplex arbeitet, und OFF, wenn es in Halb-duplex arbeitet.

• **ON LED (verde): Il LED è ON quando il modulo è alimentato.** - ON LED (green): Power supply on. - VOYANT ON (vert) : Le voyant est ON lorsque le module est alimenté. - LED ON (verde): El LED está ON cuando el módulo está alimentado. - ON LED (grün): Die LED ist ON, wenn das Modul versorgt wird.



RESET



- Pressione breve, meno di 3 secondi --> Reboot del dispositivo.
- Pressione di almeno 3 secondi --> I LED SPEED (verde) e FDX (giallo) iniziano a lampeggiare alternativamente. In questa fase, rilasciando il pulsantino, i valori di default della connessione vengono ripristinati e avviene un reboot.
- A short pushing, shorter than 3 seconds --> Device reboot.
- A push longer than 3 seconds --> SPEED (green) and FDX (yellow) LEDs start blinking alternately. In this phase, by releasing the Reset button, the default network parameters are restored and the device reboots.
- Pression courte, moins de 3 secondes --> Reboot du dispositif.
- Pression de 3 secondes au moins --> le voyant SPEED (vert) et le voyant FDX (jaune) commencent à clignoter alternativement. Lors de cette phase, si petit bouton est relâché, les paramètres par défaut de la connexion sont restaurés et le dispositif effectue un reboot.
- Presión breve, menos de 3 segundos --> El dispositivo ejecuta un reinicio.
- Presión durante al menos 3 segundos --> El led SPEED (verde) y el led FDX (amarillo) empiezan a parpadear alternadamente. En esta fase, si se suelta el pulsador pequeño, se restablecen los parámetros predeterminados de la conexión y el dispositivo ejecuta el reinicio.
- Kurzer Druck, weniger als 3 Sekunden --> Reboot der Vorrichtung.
- Druck von mindestens 3 Sekunden --> Die LED SPEED (grün) und FDX (gelb) beginnen abwechselnd zu blinken. Durch Loslassen der Taste in dieser Phase werden die Standardwerte der Verbindung rückgesetzt und es erfolgt ein Reboot.



(ref. IEEE 802.3 AS, EN 62368-1:2018, EN 55032 CISPR 32, EN 61000-4)

LAN Interface

10/100 BASE-T Ethernet	Hardware connection	RJ-45
	SW protocol	TCP/IP EU863-870
	Application level protocols	HTTP, Modbus/TCP SNTP, DHCP, DNS

DIN-rail mounting

(acc. to DIN 43380 and EN60715)

Housing	1 module (18 mm)
DIN-rail	35 mm
Module depth	70 mm

Power supply

Operating Voltage	230 V~ +/- 20%
Power consumption	<=1.5 W
Operating Frequency	45-65 Hz

Wiring Connection

screw head Z +/-	POZIDRIV PZ0
Solid wire min (max) section	0.15 (2.5) mm ²
Stranded wire min (max) section	0.15 (4) mm ²

Wires acc. to IEC 60332-1-2 if section >= 0.5 mm², acc. to IEC 60332-2-2 for smaller sections

EMC Disturbances

Compliant with Conducted emissions and Radio interferences EN 55032 CISPR 32 Class B

EMC Immunity

EN 61000-4-2 - Electrostatic discharge immunity 8kV
 EN 61000-4-3 - Immunity to radiated RF electromagnetic field
 EN 61000-4-4 - Electrical fast transient/burst immunity - 4 kV on mains circuit - 2kV (capacitive clamped) on LAN connector
 EN 61000-4-5 - Immunity to surges - 4 kV surge pulses

Electric Safety

(acc. to EN 62368-1:2018)

Pollution degree	2
Overvoltage category	III
Working Voltage	300 V
Flammability (acc. to UL 94)	class V0

Insulation

(acc. to IEC 61140)

II	(symbol IEC 60417-5172 (2003-02))
	Reinforced Insulation between Mains supply circuit (HLV circuit) and communication circuit (SELV circuit)
-	a.c. Required Transient Voltage = 4 kV peak
-	Impulse withstand voltage test (1.2/50 µsec pulse) = 7.68 kV peak
-	AC withstand voltage test (for 5 seconds) = 4.18 Vrms
-	routine AC withstand voltage test = 3,4 kV rms on each single equipment for 1 second

Environmental conditions

Operating Temperature	-25°C — +55°C
Storage Temperature	-25°C — +70°C
Relative Humidity not condensing	
yearly average	<= 75%
on 30 days per year	<= 95%
Installation	Indoor
Altitude	<=2000 m.
Degree of Protection	IP20 (*)

(*) The device must be installed inside a cabinet with IP rating IP51 or better. Any exposed parts (outside the cabinet) must have a minimum degree of protection IP51. Furthermore, the cabinet must have a Flammability degree V1 (according to UL-94) or better.

DEFAULT VALUES

Protocol = Modbus TCP

Address = 001 (To connect more than one modbus interface send a command to the 4115 address. Modbus address: #New Id Modbus#)

Baud rate <= 100 Mbit/s

ADDRESS MODBUS TABLE

Register	Definition	Energy meter		Notes
		Triphase	Monoph.	
4099	Type of device (0= no communication, 1= triphase, 3= monophase,)	x	x	Reading general registers
4100	Interface FW version	x	x	
4101	Overflow allarm (0= no overflow)	x	x	
4102	Present tariff (0=Tariff1 activated, 1=Tariff2 activated)	x	x	
4104	PID (device identification) bytes 1 e 2	x	x	
4105	PID – bytes 3 e 4	x	x	
4106	PID – bytes 5 e 6	x	x	
4107	PID– bytes 7 e 8	x	x	
4108	PID– bytes 9 e 10	x	x	
4109	PID– bytes 11 e 12	x	x	
4110	PID– bytes 13 e 14	x	x	
4111	Type of protocoll (0=ModbusRTU, 1=ModbusASCII)	x	x	Writing registers
4112	Speed of transmission (1200, 2400, 4800, 9600, 19200, 38400)	x	x	
4113	Parity (0= no, 1= even, 2= odd)	x	x	
4114	Stop bits (1= 1Bit, 2=2Bits)	x	x	
4115	Modbus address (from 1 to 247)	x	x	
4116	Command for interface reset (0= modification memorized, 1= 4111- 4115 register modification memorized)	x	x	
4117	Value format (0= floating points 32bit, 1= entire)	x	x	
4118	Command for the energy meter reset (1= reset of active energy register, 2= reset of reactive energy register, 3= reset of all the registers)	x	x	

4119 – 4122	Active energy L1, T1, imp (kWh)	x	x	Reading value register Concerning register 4117 -if I had float value all the data are in 2 registers -if I had entire value: => 2 registers: (Reg1 * 65536 + Reg2) / 10000 => 4 registers: ((Reg1 * 65536 + Reg2)* 1000000000) + Reg3 * 65536 + Reg4) / 10000
4123 – 4126	Active energy L2, T1, imp (kWh)	x		
4127 – 4130	Active energy L3, T1, imp (kWh)	x		
4131 – 4134	Active energy Σ T1, imp (kWh)	x		
4135 – 4138	Active energy L1, T2, imp (kWh)	x	x	
4139 – 4142	Active energy L2, T2, imp (kWh)	x		
4143 – 4146	Active energy L3, T2, imp (kWh)	x		
4147 – 4150	Active energy Σ T2, imp (kWh)	x		
4151 – 4152	Active power L1 (kW)	x	x	
4153 – 4154	Active power L2 (kW)	x		
4155 – 4156	Active power L3 (kW)	x		
4157 – 4160	Active power Σ (kW)	x		
4161 – 4164	Active energy L1, T1, exp (kWh)	x	x	
4165 4168	Active energy L2, T1, exp (kWh)	x		
4169 – 4172	Active energy L3, T1, exp (kWh)	x		
4173 – 4176	Active energy Σ T1, exp (kWh)	x		
4177 – 4180	Active energy L1, T2, exp (kWh)	x	x	
4181 – 4184	Active energy L2, T2, exp (kWh)	x		
4185 – 4188	Active energy L3, T2, exp (kWh)	x		
4189 – 4192	Active energy Σ T2, exp (kWh)	x		
4189 – 4192	Active energy Σ T2, exp (kWh)	x		
4193 – 4196	Reactive energy L1, T1, imp (kvarh)	x	x	
4197 – 4200	Reactive energy L2, T1, imp (kvarh)	x		
4201 – 4204	Reactive energy L3, T1, imp (kvarh)	x		
4205 – 4208	Reactive energy Σ T1, imp (kvarh)	x		
4209 – 4212	Reactive energy L1, T2, imp (kvarh)	x	x	
4213 – 4216	Reactive energy L2, T2, imp (kvarh)	x		
4217 – 4220	Reactive energy L3, T2, imp (kvarh)	x		
4221 – 4224	Reactive energy Σ T2, imp (kvarh)	x		

4225 - 4228	Reactive energy L1, T1, exp (kvarh)	x	x	
4229 - 4232	Reactive energy L2, T1, exp (kvarh)	x		
4233 - 4236	Reactive energy L3, T1, exp (kvarh)	x		
4237 - 4240	Reactive energy Σ T1, exp (kvarh)	x		
4241 - 4244	Reactive energy L1, T2, exp (kvarh)	x	x	Reading value registers
4245 - 4248	Reactive energy L2, T2, exp (kvarh)	x		
4249 4252	Reactive energy L2, T3, exp (kvarh)	x		
4253 - 4256	Reactive energy Σ T2, exp (kvarh)	x		
4257 - 4258	Reactive power L1 (kvar)	x	x	
4259 - 4260	Reactive power L2 (kvar)	x		
4261 - 4262	Reactive power L3 (kvar)	x		
4263 - 4266	Reactive power Σ (kvar)	x		
4267 - 4268	Voltage L1-N (V)	x	x	
4269 - 4270	Voltage L2-N (V)	x		
4271 - 4272	Voltage L3-N (V)	x		
4273 - 4274	Voltage L1-L2(V)	x		
4275 - 4276	Voltage L2-L3(V)	x		
4277 - 4278	Voltage L3 - (V) L1	x		
4279 - 4280	Current L1 (A)	x	x	
4281 - 4282	Current L2 (A)	x		
4283 - 4284	Current L4 (A)	x		
4285 - 4286	Apparent power L1 (kVA)	x	x	
4287 - 4288	Apparent power L2 (kVA)	x		
4289 - 4290	Apparent power L3 (kVA)	x		
4291 - 4294	Apparent power Σ (kVA)	x		
4295 - 4296	Power factor $\cos \phi$ L1	x	x	
4297 - 4298	Power factor $\cos \phi$ L2	x		
4299 - 4300	Power factor $\cos \phi$ L3	x		
4301 - 4302	Power factor $\cos \phi \Sigma$	x		
4303 - 4304	Frequency (Hz)	x	x	

Punto di contatto indicato in adempimento ai fini delle direttive e regolamenti UE applicabili:

Contact details according to the relevant European Directives and Regulations:

GEWISS S.p.A. Via A.Volta, 1 IT-24069 Cenate Sotto (BG) Italy tel: +39 035 946 111 E-mail: qualitymarks@gewiss.com

According to applicable UK regulations, the company responsible for placing the goods in UK market is:

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8:30 - 12:30 / 14:00 - 18:00
lunedì - venerdì / monday - friday



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