

DC3

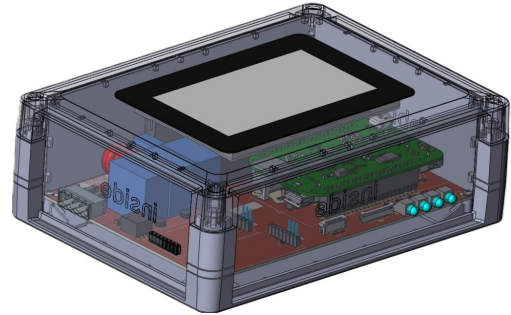
Industrial Edge Gateway

Cellular · Wi-Fi · G3-PLC · Modbus TCP/IP — every interface on one DIN-rail device.



Overview

The DC3 bridges legacy industrial devices to modern cloud platforms over any available medium — cellular, Wi-Fi, G3-PLC power-line mesh, or Modbus TCP/IP. It powers directly from the AC line (80–480 VAC, 15 VA), mounts on a standard 35 mm DIN rail, and connects to ARG Cloud via MQTT with no network infrastructure required.



Key Features

- Four communication interfaces on one device — cellular LTE Cat-4 (eSIM + nano-SIM), Wi-Fi 802.11 b/g/n, G3-PLC power-line mesh, and Modbus RTU / TCP-IP.
- G3-PLC mesh: up to 255 nodes per cluster with ~3-mile range over existing AC wiring — no new cabling.
- Bridges legacy Modbus RTU/TCP field devices to ARG Cloud, on-prem SCADA, or BMS.
- AC line powered, 80–480 VAC (15 VA), with 3.75 kVAC galvanic isolation.
- Preconfigured MQTT to ARG Cloud — remote monitoring, OTA firmware updates, and alerts.
- 35 mm DIN-rail mount, IP40 enclosure, –40 to +75 °C operation.

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Communication interfaces

255

Nodes / G3-PLC cluster

80–480 V

AC power input

3.75 kV

Galvanic isolation

Technical Specifications

Power Input	80–480 VAC, 50/60 Hz, 15 VA max
Isolation	3.75 kVAC galvanic isolation
Cellular	LTE Cat-4 (4G), embedded eSIM + nano-SIM slot; ARG Cloud MQTT preconfigured
Wi-Fi	802.11 b/g/n, 2.4 GHz
G3-PLC	ITU-T G.9903 (CENELEC-B); up to 255 nodes/cluster; ~3 mile range over existing wiring
Modbus	Modbus RTU (RS-485) master/slave + Modbus TCP/IP via Ethernet 10/100
Ethernet	10/100 BASE-T, RJ-45
Cloud Connectivity	MQTT to ARG Cloud; on-premises MQTT broker and SCADA/BMS integration supported
Operating Temperature	–40 °C to +75 °C
Enclosure Rating	IP40
Mounting	35 mm DIN rail

Standards

ITU-T G.9903, IEEE 802.11 b/g/n, Modbus Application Protocol V1.1b3

Applications

Industrial Automation

Aggregate Modbus RTU devices — PLCs, drives, sensors — and forward data to SCADA, MES, or ARG Cloud over cellular or Ethernet.

Building Automation

Retrofit G3-PLC mesh into commercial buildings over existing wiring. Monitor energy, HVAC, and access control with no new cable runs.

Smart Grid / Utility

Deploy a G3-PLC network across a distribution feeder — 255 nodes per cluster, up to 3 miles range, with ARG Cloud backhaul via cellular.

Remote & Harsh Sites

IP40 rated, -40 to +75 °C. Powers from the local AC panel. Cellular backhaul where Ethernet is unavailable.
