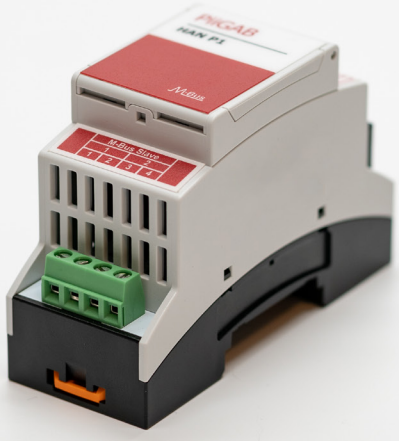
PiiGAB P1 Converter
Datasheet



Technical specifications

Compatible M-Bus masters:
PiiGAB P1 Converter is generic and works with all M-Bus masters that follow EN-13757-2, 3.

Number of loads: 1 (1.5 mA)

Measurement data:
P1 utility meters send messages with a resolution of 1-10 seconds.

PiiGAB P1 receives and stores the latest received value. When queries are made on the M-Bus loop, the latest stored value is sent.

PiiGAB P1 Converter reads and converts all messages contained in the table on the next page.

Gates:
1xRJ12 for connection of utility meter. The other port is only used in select markets or when external power supply is required. See the accessories document.

2xM-Bus slave ports with parallel connection to facilitate connection to other meters.

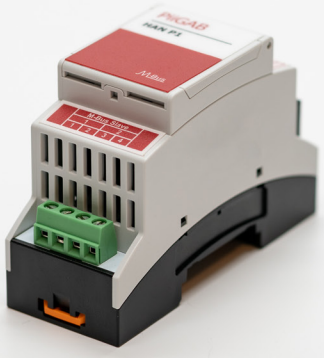
The M-Bus telegram:
Manufacturer code: PII
Medium: Bus converter
One secondary address with the above manufacturer code will be present on the M-Bus loop.

Electricity supply: No external power supply required. Power is supplied from the electricity meter via the P1 port. Utility meters without power supply via the P1 port can be supplemented with our Power supply kit.
See piigab.com or the accessories document.

Enclosure: IP 20
Dimensions: WxHxD 36 x 90 x 62.2
Mounting: DIN rail
M-Bus: EN13757-2, -3.
Baud rate: 300, 2400 (Default), 9600
P1 Standard: P1 Companion Standard, Dutch Smart Meter Requirements

PiiGAB P1 Converter

Datarecords



Type Of Value	Datatype	Unit
Meter ID	LVAR	Second extension VIF
Equipment identifier	LVAR	Enhanced identfication
Timestamp	INT48	Date / time
Active energy Import (A14), Tariff 1	INT32	Energy [10^0 Wh]
Active energy Export (A23), Tariff 1	INT32	Energy [10^0 Wh]
Active energy Import (A14), Tariff 2	INT32	Energy [10^0 Wh]
Active energy Export (A23), Tariff 2	INT32	Energy [10^0 Wh]
Tariff indicator	INT16	Second extension VIF
Current average demand active energy import	INT32	Power [10^0 W]
Maximum demand Active Energy import of the current month	INT48 Storage 1	Date / time
Maximum demand Active Energy import of the current month	INT32 Maximum Storage 1	Power [10^0 W]
Maximum demand history (last 13 months)	Expands to multiple Mbus records according to Appendix F in EN 13757-3. See example below	
Active Power Import (P+)	INT32	Power [10^0 W]
Active Power Export (P-)	INT32	Power [10^0 W]
Active Power Import (P+), L1	INT32	Power [10^0 W]
Active Power Import (P+), L2	INT32	Power [10^0 W]
Active Power Import (P+), L3	INT32	Power [10^0 W]
Active Power Export (P-), L1	INT32	Power [10^0 W]
Active Power Export (P-), L2	INT32	Power [10^0 W]
Active Power Export (P-), L3	INT32	Power [10^0 W]
Voltage, L1	INT16	Second extension VIF
Voltage, L2	INT16	Second extension VIF
Voltage, L3	INT16	Second extension VIF
Current, L1	INT32	Second extension VIF
Current, L2	INT32	Second extension VIF
Current, L3	INT32	Second extension VIF
Sub-meter Ch 1 Device type	INT8	Second extension VIF
Sub-meter Ch 1 Equipment identifier	LVAR	Fabrication number
Sub-meter Ch 1 Capture time	INT48	Date / time
Sub-meter Ch 1 Value	INT32	Volume [10^-3 m3] Energy [MJ] Energy [Wh]
Sub-meter Ch 2 Device type	INT8	Second extension VIF
Sub-meter Ch 2 Equipment identifier	LVAR	Fabrication number
Sub-meter Ch 2 Capture time	INT48	Date / time
Sub-meter Ch 2 Value	INT32	Volume [10^-3 m3] Energy [MJ] Energy [Wh]
Sub-meter Ch 3 Device type	INT8	Second extension VIF
Sub-meter Ch 3 Equipment identifier	LVAR	Fabrication number
Sub-meter Ch 3 Capture time	INT48	Date / time
Sub-meter Ch 3 Value	INT32	Volume [10^-3 m3] Energy [MJ] Energy [Wh]
Sub-meter Ch 4 Device type	INT8	Second extension VIF
Sub-meter Ch 4 Equipment identifier	LVAR	Fabrication number
Sub-meter Ch 4 Capture time	INT48	Date / time
Sub-meter Ch 4 Value	INT32	Volume [10^-3 m3] Energy [MJ] Energy [Wh]
Softare version	INT16	Second extension VIF