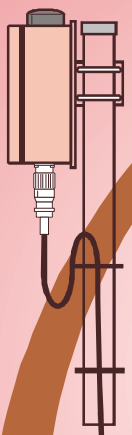
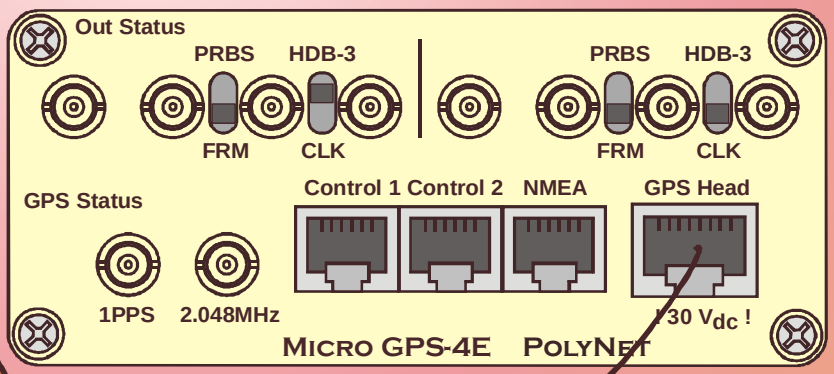
EQUIPMENT FOR HIGH PERFORMANCE SYNCHRONISATION OF TELECOMMUNICATIONS NETWORK



Micro GPS-4E

INTELLIGENT LOW COST GPS BASED SYNCHRONISATION SOURCE



- ☺ PRC quality output in GPS locked state
- ☺ Excellent holdover capability
- ☺ Eight 2.048 MHz and 2.048 Mbps synchronising outputs
- ☺ Optional 1PPS output
- ☺ NMEA output to supply NTP server
- ☺ Management Interface
- ☺ Alarm output
- ☺ Low power consumption
- ☺ Maintenance-free full autonomous operation

POLYNET

EQUIPMENT FOR HIGH PERFORMANCE SYNCHRONISATION OF TELECOMMUNICATIONS NETWORK

TECHNICAL DATA

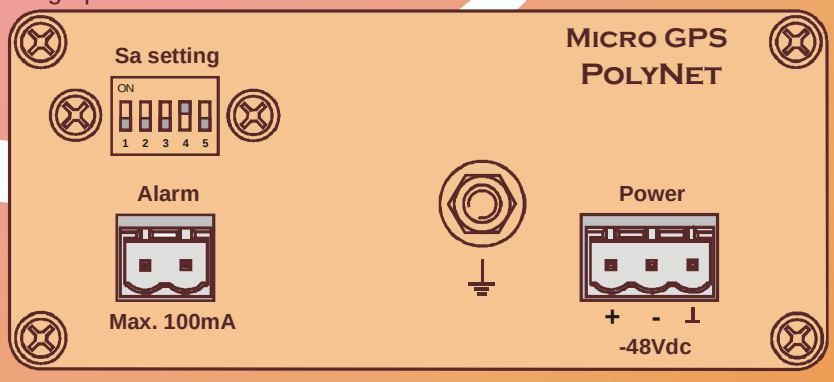
GPS receiver outdoor unit (GPS-HD2)

GPS receiver:	12 channel C/A code receiver
Receiver frequency:	L1 carrier, 1575.42 MHz
Updating frequency:	1 Hz
Interface to MicroGPS-4E indoor unit:	RS-485 (satellite data output, clock output, 1 PPS output, configuration input)
Cable length between outdoor and indoor units:	Max. 200 meters (Cat-5 outdoor cable)
Power supply:	30 V_{dc}
Environment:	-25…+70ºC; IP 67
Dimensions, weight:	125x80x57 mm; 0,4 kg

GPS receiver indoor unit (MicroGPS-4E)

Interface to the GPS-HD2 head:	RS-485 (Satellite data reception, clock reception, 1 PPS reception, GPS Head configuration download to head)
Power supply to the head:	+30 V_{dc}, (150 mA current limited)
Outputs:	One 2.048 MHz, G.703(13), 75 ohm; 1.0/2.3 female coax connector One 1PPS; 2.5Vpp, 75 ohm; 1.0/2.3 female coax connector Eight 2.048 MHz and 2.048 Mbps outputs in two groups – 2.048 MHz, G.703(13), 75 ohm; 1.0/2.3 female coax connector – 2.048 Mbps G.703(9), 75 ohm; framed or 2^{15}-1 PRBS, 1.0/2.3 female coax connector;
Accuracy:	$\pm 1x10^{-11}$ One day average in GPS locked state
Stability in GPS locked state:	MTIE: EN 300 462-6-1 (1998-05), Figure 1. ITU-T G.811 (09/97) Figure 1
NMEA / 1PPS interface	EIA/TIA-232; 19.2 kbps, 8/1/N; Connector: 6P6C (RJ-12)
Management interface	EIA/TIA-232; 115.2 kbps, 8/1/N; Connector: 6P6C (RJ-12)
Alarm interface	Dry relay contact (max. 60V_{dc}, 100 mA) Connector: 2P 2# CPF5.08/2 2.5 mm^2 12A (MSTB2.5/2)
Power supply	-41…-60 V_{dc} 12 W max Connector: 3P 2# CPF5.08/3 2.5 mm^2 12A (MSTB2.5/3)
Environment	-5…+50ºC
Size, weight	105 x 46 x 240 mm; 0.7 kg

The MicroGPS-4E synchronization source is an intelligent and cost effective backup network clock device for far end transmission network nodes, GSM base stations and 3G Node-B sites, as well as WiMAX and remote satellite base stations. In addition to this, it can be use as high precision time reference of NTP servers.



Typical installation set

GPS-HD2 GPS head and fixing accessories
MicroGPS-4E indoor unit
20 m outdoor cable to head connection (FTP outdoor cable)
Lightening arrestors (VIL-1 and VIL-2)
5 m indoor cable (8P8C connector)
MSTB2.5/3 connector for power cable preparation
MSTB2.5/2 connector for alarm cable preparation
1.0/2.3 connectors for output cables preparation
6P6C – DB9 cable to PC and NTP server connection

PolyNet Ltd. reserves the right to change the specifications for improvement without notice.
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