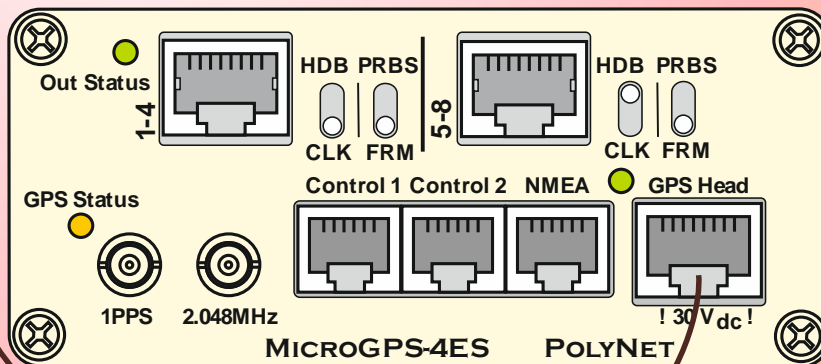


Micro GPS-4ES

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

EQUIPMENT FOR HIGH PERFORMANCE SYNCHRONISATION OF TELECOMMUNICATIONS NETWORK

TECHNICAL DATA

GPS receiver outdoor unit (GPS-HD)

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...+70°C; IP 67
Dimensions, weight:	80x80x330 mm; 0,4 kg

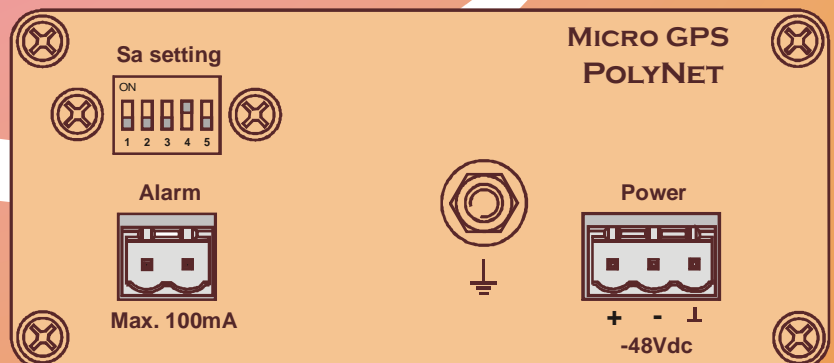
GPS receiver indoor unit (MicroGPS-4ES)

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 <ul style="list-style-type: none"> - 2.048 MHz, G.703(13), 120 ohm; 8P8C (RJ-45) connector - 2.048 Mbps G.703(9), 120 ohm; framed or 2¹⁵-1 PRBS, 8P8C (RJ-45) connector;
Accuracy:	±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...+50°C
Size, weight	105 x 46 x 240 mm; 0.7 kg

The MicroGPS-4ES 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-HD GPS head and fixing accessories
- MicroGPS-4ES indoor unit
- 20 m outdoor cable to head connection
- 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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