Product Specification

A-GEAR P100K

Collection Terminal ONU Remote Communication Module

1. Introduction

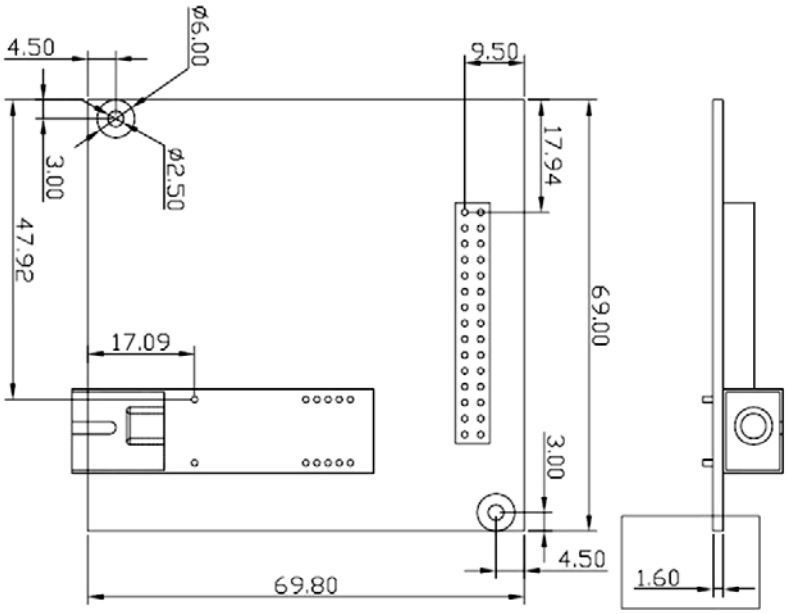
Abiding by IEEE802.3ah, A-GEAR P100 series meets relevant requirements of GEPON OUN regulated in Technical Requirements of YD/T1475-2006—Ethernet-Based EPON and China Telecom EPON Technical Requirement CTC2.0/2.1. The telecommunication technology and model of this series comply with relevant standards of the electricity information collection system in the electric power industry, and it adopts TCP/IP, so this series is suitable for the remote communication of the concentrator.

2. Technical Parameters

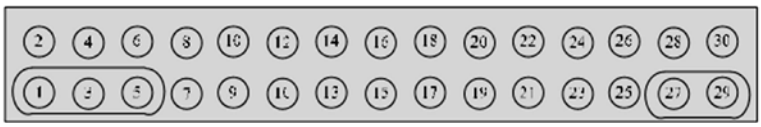
Item	Remarks
Standard	Technical Requirements of YD-T 1475-2006 Access Network-- EPON China Telecom EPON Technical Requirements--CTC2.0/2.1 Q/GDW 375.1-2009 Electricity Information Collection's Model Standard: Transformer Collection Terminal's Model Standard Q/GDW 375.2-2009 Electricity Information Collection's Model Standard: Transformer Collection Terminal's Model Standard Q/GDW 376.1-2009 Electricity Information Collection's Telecommunication Protocol: Telecommunication Protocol Between Station and Information Collection Terminal
Port Configuration	1 GEPON interfaces Interface type: SC/PC patch

Item	Remarks
Attributes of the PON port	A 1.25Gbps transmission rate with downlink and uplink symmetry Working wavelength: uplink 1260nm-1360nm, downlink 1480nm-1500nm Network coverage diameter: 20 kilometers Optical physical condition: 1000 BASE-PX20 Average light remitting power: -1~4dBm Optical reception sensitivity: -30dBm Security: MAC authentication mechanism Distance test range: 0--20km Distance test precision: -16--+16ns
Functions of the serial interface	Type of the serial interface: RS485 Maximum port rate: 9600~38400bps Type of the session: supporting TCP server, TCP Client and UDP Supporting the transparent transmission of multiple electric power communication regulations such as IEC60870-5-101/104, EC61850, CDT and DNP.
Interconnection	Satisfying the functions and performance of OLT and ONU Satisfying the interconnection of the maximum optical coupling ratio, the maximum transmission distance and the differential transmission distance Satisfying the MPCP protocol, including the interconnection between LLID and multiple LLID, the ONU authentication mode and the ONU authorization mode, DBA, FEC, the standardization and interconnection of the link-layer encryption algorithm
Reliability	Supporting hot swap
Management configuration	EPON devices comply with the OAM function that is regulated in Clause 57 in IEEE802.3-2005. Supporting the collection terminal to set the ONU module (relevant functions need be developed according to customization)
Power Source	Input voltage: 5V Maximum power consumption (W) < 1.5W
Environment requirements	Working temperature: -40°C ~ 70°C Storage temperature: -40°C ~ 70°C Relative humidity: 5% ~ 95% no condensation

3. Structure and Size



4. Pin Definition



5. Order Information

Model	Description
P100K	Transformer collection terminal ONU remote communication module