

Product Specification

A-GEAR P100C

Remote Communication Module of Concentrator



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 this series adopts TCP/IP, so this series is suitable for the remote communication of the concentrator.

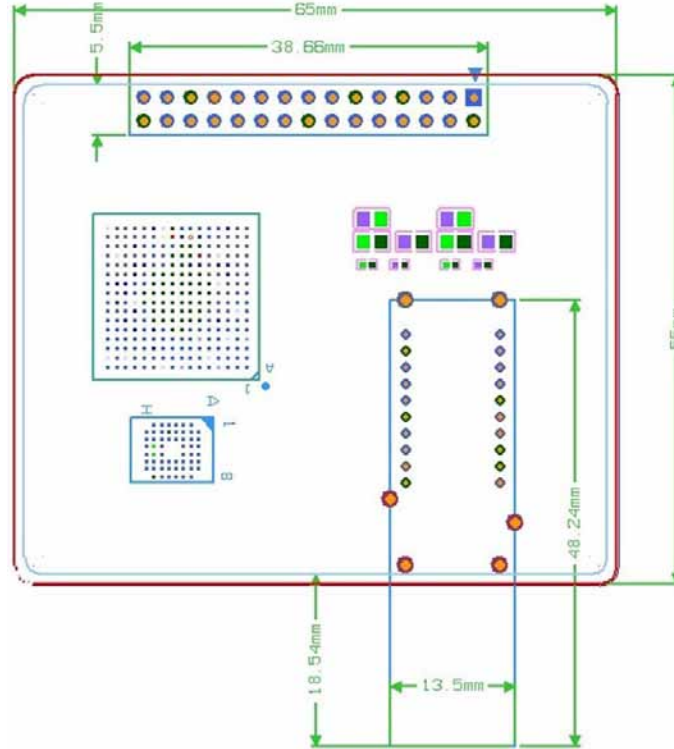
2. Technical Parameters

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 GEAPON interfaces Interface type: SC/PC patch

A-GEAR World Wide Manufacturing

Item	Remarks
Attributes of the PON port	<p>A 1.25Gbps transmission rate with downlink and uplink symmetry Working wavelength: uplink 1260nm-1360nm, downlink 1480nm-1500nm</p> <p>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</p>
Functions of the serial interface	<p>Port type RS485 Maximum port rate: 9600~38400bps</p> <p>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.</p>
Interconnection	<p>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</p> <p>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</p>
Reliability	Supporting hot swap
Management configuration	<p>EPON devices comply with the OAM function that is regulated in Clause 57 in IEEE802.3-2005.</p> <p>Supporting the collection terminal to set the ONU module (relevant functions need be developed according to customization)</p>
Power Source	<p>Input voltage: 5V Maximum power consumption < 1.5W</p>
Environment requirements	<p>Working temperature: -40°C ~ 70°C Storage temperature: -40°C ~ 70°C Relative humidity: 5% ~ 95% no condensation</p>

3. Structure and Size



4. Pin Definition



5. Order Information

Model	Description
P100C	Concentrator