RAISECOM
Raisecom Technology Co., Ltd

Datasheet

ITN201

Intelligent Service Acess Aggregation Platform

iTN201, with redundant AC or DC power supply, provides 4*1GE uplinks +12*GE downlinks, or 2*10GE uplinks + 12*GE downlinks, and 2 sub slot which can insert Ethernet service card (include 2*10GE card), E1/T1 emulation card and PTP card. As part of the iTN solution deployed on the edge of carrier networks, it provides a very competitive solution with high port density which reduces the cost per line, plus scalable network ability and a smart way to reduce OPEX with its rich OAM & troubleshooting functions.

ITN201 also could be deployed 10G CPE NID.

iTN201

CE 2.0 MEF CERTIFIED

Highlights

Network Security	Upgraded security with port-isolation, advanced ACL, broadcast/multicast/DLF storm control, unique port loopback detection, and DHCP Client/Option82 functionality
Resiliency & Protection	ITU-T G.8031 linear and ITU-T G.8032 ring protection with switching time less than 50ms; IEEE 802.1ax Link Aggregation G.8131 linear protection for MPLS-TP in LSP layer and PW layer
MPLS-TP	MPLS-TP compliant to G.8113.1, providing both scalability and service security
OAM	IEEE 802.3ah Link OAM, IEEE 802.1ag end-to-end connectivity OAM and ITU-T Y.1731 end-to-end service and performance, SLA reporting
Management	Auto-Provisioning, plug&play, single IP for all the connected remote devices, end to end configuration Device management and VPN service management in Nview platform
SAT	Service activation test using Y.1564 or RFC2544 up to 8 stream, act as a generator or a reflector
QoS	Advanced QoS technology allows stream-marking based on CoS, DSCP, IP precedence and priority; scheduling modes including SP, WRR, SP+WRR; 0-15 WRED, flow-based mirroring/rate-limit/redirection/VLAN swapping and rewriting HCAR
Clock	Carrier-class EDD with support of SyncE/IEEE1588 for mobile backhaul applications
Power Reliability	Dual hot-swappable power supply, with voltage/temperature alarms
PWE3	encapsulation protocols: SAToP and CESoPSN

International Headquarters
Raisecom Building, No. 11, East Area, No. 10 Block, East Xibeiwang Road, Haidian District, Beijing, P.R.China
Tel: +86 10 8288 3305
Fax: +86 10 8288 3056
Email: export@raisecom.com

U.S.A. Headquarters
19337 US 19 North, Suite 306
Clearwater, Florida. 33764. USA.
Tel: +1 888 816 4808
Fax: +1 727 547 9124
Email: sales@raisecomusa.com

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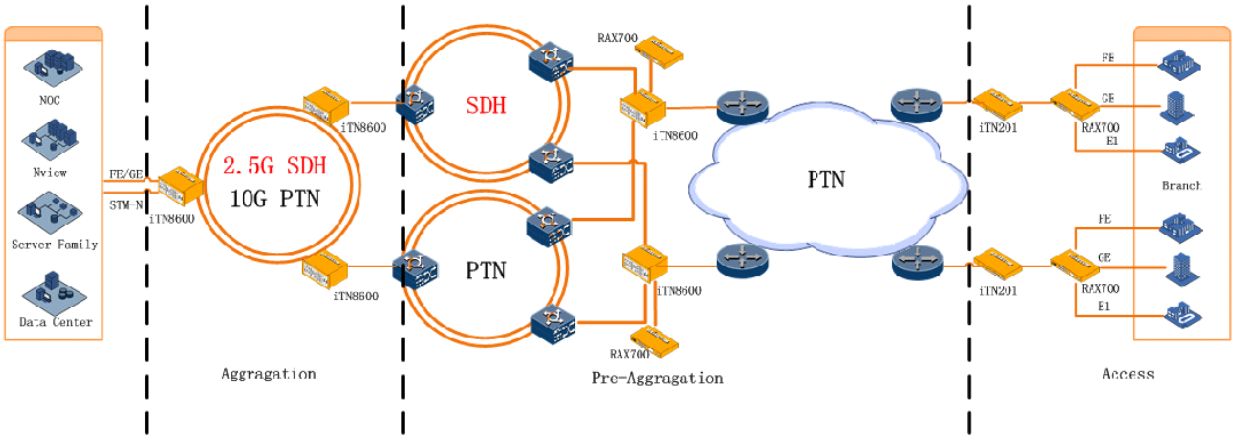
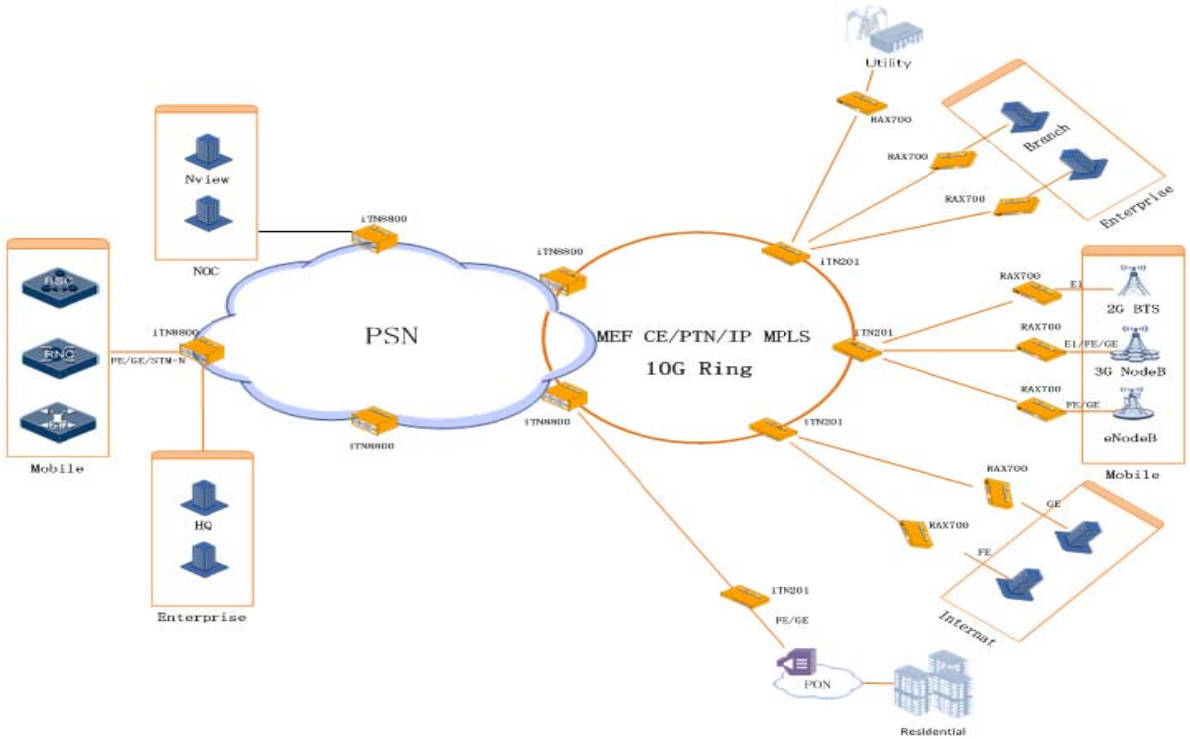
Typical Application

L2VPN Scenario



Wholesale Scenario



International Headquarters
Raisecom Building, No. 11, East Area, No. 10 Block, East Xibeiwang Road, Haidian District, Beijing, P.R.China
Tel: +86 10 8288 3305
Fax: +86 10 8288 3056
Email: export@raisecom.com

U.S.A. Headquarters
19337 US 19 North, Suite 306
Clearwater, Florida. 33764. USA.
Tel: +1 888 816 4808
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Ethernet

MTU:12,288 byte

Up to 32k MAC

Support 4,094VLANs (C-tag), stacked VLANs (QinQ, S-tag)

Layer 2 loopback on single and multiple flows

Layer 2 control protocol (L2CP) handling

Synchronization1

ITU-T G.8262 Synchronous Ethernet

IEEE1588 TC/OC/BC

IP Services

DHCP client, option61, server

IPv4, Static management routing

Traffic Management

Service classification per port/VLAN/CoS(DSCP)

Support SP, WRR and SP+WRR scheduling modes, and up to 8 queues per port

MEF-compliant 3-color policing with color-aware and color-blind mode

Bandwidth throttling per port/VLAN/CoS(DSCP), CIR/EIR per flow

Support hierarchical bandwidth profile in the ingress direction

Security

ACL based on VLAN, CoS, MAC, EtherType, IPv4, IPv6, or user-define combinations

RADIUS, TACACS+

Storm control (broadcast, multicast, DLF)

Reliability

Link aggregation group (LAG)

Interface backup

ITU-T G.8031 Ethernet link protection switching (ELPS) and G.8032 Ethernet ring protection switching (ERPS) with the automatic protection switchover time less than 50ms

Port/VLAN-based Ethernet local loop detection

Fault propagation

AC&DC dual-feed power supplies

Ethernet OAM

IEEE 802.3ah EFM-OAM link management

IEEE 802.1ag connectivity fault management (CFM) with 3.3ms CCM resolution

ITU-T Y.1731 performance monitoring (PM)

Hardware-based frame delay (FD) measurement

RFC2544, Y.1564

Hardware-based SLA KPIs per port or EVC, which include throughput, delay, jitter, packet loss and availability

Dying gasp message in case of power failure

Auto-Provisioning

Auto-establishment of management tunnels across L2/L3 networks

Easy generation and distribution of massive configuration files using GUI-based toolkit

System Management

Remote management via SNMP v1/v2/v3, Telnet and SSH v1/v2

Local management via console interface

MEF 36 compliant MIB

KeepAlive, RMON, LLDP, Syslog

Port/VLAN/CoS-based statistics

SFP digital diagnostic management (DDM)

Fan, temperature and CPU monitoring

Voltage and temperature monitoring

Dual system

MPLS-TP

MPLS OAM and APS MPLS L2VPN VPLS

Standard Compliance

IEEE802.1Q, 802.1ad, 802.1ag, 802.1D, 802.1w, 802.1s, 802.1p, 802.1x, 802.3ad, 802.3ah,1588

ITU-T G.8262, G.8031, G.8032, Y.1564, Y.1731

IETF RFC 2865 (RADIUS), 2819 (RMON) RFC3985(PWE3) 4664(L2vpn)

MEF 6,8,9,10,11,13,14, 16,17,20,31,36 (CE2.0-certified)

Safety CE certified, UL and RoHS compliant

EMI Class A

International Headquarters
Raisecom Building, No. 11, East Area, No. 10 Block, East Xibeiwang Road, Haidian District, Beijing, P.R.China
Tel: +86 10 8288 3305
Fax: +86 10 8288 3056
Email: export@raisecom.com

U.S.A. Headquarters
19337 US 19 North, Suite 306
Clearwater, Florida. 33764. USA.
Tel: +1 888 816 4808
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Specifications

Performance	Switching fabric: 56Gbps;
Physical Interface	Management port: 1 console (USB); 1 outband SNMP(RJ45)
	Client interfaces:6x 100/1000 Base-X TSFP port;
	Network interfaces:4 x 1Gbps SFP port or 2 x 10Gbps SFP port
Subcard	Ethernet card: 4GE/GF card, 2XG card
	CES card: 8E1T1 card, 8E1 card
	Clock card: PTP card with 1PPS+ToD, 1*ToD interface, 1*1PPS interface 2M input/output interface;
Power Specs	AC: 100~240V, 47~63Hz; DC: -48V or +24V; Full load: ≤70W
User Conditions	Operating temp: 0~50˚C (32~122˚F); Storage temp: -25~70˚C (-13~158˚F);
	Humidity: 10~90% non-condensing
Dimensions	440(W) x 266(W) x 44(H) mm^3
Weight	≤6Kg

Ordering Information

iTN201-4GF-X	4GF uplink with 6TSFP downlink, X could be any combination of AC and DC mentioned above
iTN201-2XG-X	2XG uplink with 6TSFP downlink, X could be any combination of AC and DC mentioned above
iTN200-SUB-4GE	4GE copper interface card
iTN200-SUB-4GF	4GF optical interface card
iTN200-SUB-2XG	2XG optical interface card, XFP connector
iTN200-PWE3-8E1T1-BL	8 balanced E1T1 PWE3 card
iTN200-PWE3-8E1	8 unbalanced E1 PWE3 card
iTN200-SUB-TSU-BL	PTP card with 2 RJ45 BITS port, 2*1PPS+ToD port in RJ45 form, 1BNC 1PPS
iTN200-SUB-TSU	PTP card with 2 RJ45 BITS port, 2*1PPS+ToD port in CC3 form, 1BNC 1PPS
RPA0601-SI-220S12	220V AC power module for iTN201-4GF
RPD0601-48S12	-48V DC power module for iTN201-4GF
RPD0601-24S12	+24V DC power module for iTN201-4GF
RPD1101-48S12	-48V DC power module for both iTN201-4GF and iTN201-2XG
RPA1101-SI-220S12	220V AC power module for both iTN201-4GF and iTN201-2XG
FANS306	Smart tunable fan

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Raisecom Building, No. 11, East Area, No. 10 Block, East Xibeiwang Road, Haidian District, Beijing, P.R.China
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Fax: +86 10 8288 3056
Email: export@raisecom.com

U.S.A. Headquarters
19337 US 19 North, Suite 306
Clearwater, Florida. 33764. USA.
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Email: sales@raisecomusa.com

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