

ICRS-PDH-5000

ICRS-PDH-5000 is a low cost and affordable point-to-point digital microwave radio transmission system that covers most connectivity needs of a transmission network.

It is reliable, easy to install and provides a cost effective access solution for the end user.

ICRS-PDH-5000 is a standard split mount radio system consisting of an indoor unit and an outdoor unit operating at 4 to 18 GHz frequency bands. Exceptional performance combined with low operational cost makes the ICRS-PDH-5000 an ideal radio for networks around the world.



Product Features

- Supports 4 to 18 GHz Microwave frequency bands
- Higher power option up to +32 dBm
- Capacity independent ODU and frequency independent IDU
- Single coaxial cable interconnection
- Hittless receive protection switching
- Front panel LCD & keypad for easy and quick configuration
- Local frequency setting changes remote frequency automatically
- QPSK modulation with Adaptive Reed-Solomon Forward Error Correction (FEC) for high grade of service
- Software scalable BW which can be configured either locally or remotely
- Field-replaceable plug-in modules with multiple payload interfaces
- PDH interfaces: up to 16×E1 & E3
- Ethernet interfaces: 1×10/100Base-T
- Ethernet-PDH payload throughput-allocation
- ATPC reduces the co-channel and adjacent interference
- Auxiliary EOW voice and data channels
- Multi-level local and remote loop back
- An advanced SNMP Based Network Management System
- Meets all relevant ITU and ETSI standards

Applications

- 3G mobile networks and micro cellular networks
- Private links between a backbone network and customers' premises for voice and data (LAN, WAN) services
- Back up transmission link for a fibre-optic link in case of disconnection
- Transmission link for utility networks (pipelines, electricity, railways etc)

Specifications

System Parameters								
Frequency [GHz]	3.4-4.2	4.4-5.0	5.9-6.4	7.1-8.2	8.2-8.5	12.7-13.3	14.4-15.4	17.7-19.7
Channel Bandwidth 8E1	14MHz(QPSK)							
Tx Power	+23dBm				+23dBm			
High TX Power (Optional)	+32dBm				-	-	-	-
Rx Sensitivity@10 ⁻³	-83.0dBm (8E1)							
Rx Sensitivity@10 ⁻⁶	-81.0dBm (8E1)							
ATPC Range	≤20dB							
Frequency Stability	±10ppm							

Payload Parameters	
PDH Payload Line Rate	E1: 2.048Mbps
Interfaces	E1: 120Ω balanced (RJ-45) or 75Ω unbalanced(DB-37); E3: BNC connectors
Auxiliary Voice EOW Interface	Standard handset interface (RJ-11)
Data Channel1 Interface	9.6Kbps V.24 (RJ-45)
Data Channel2 Interface	9.6Kbps V.11(RJ-45)

Configuration	
Radio Configurations	1+0, 1+1
Radio Protection	Hitless (errorless) switching with hot-standby, frequency and space diversity
Tributary Protection	Single

Mechanical/Environmental	
Dimensions (W)x(D)x(H)	IDU: 48.2cm x 25.4cm x 4.4cm (1U); ODU: 39.0cm x 31.0cm x 15.6cm
Weight	IDU: 3Kg; ODU: 6.8Kg
Operating Temperature	IDU: -10°to +50°C; ODU: -30°to +55°C
Altitude	< 5,000 meters
Humidity	IDU: 95% non-condensing; ODU: 100% all-weather
Power Input	-48VDC (-36Vto-72VDC)
Power Consumption	1+0: ≤65W; 1+1: ≤130W
Cooling	Natural convection
ODU-IDU Interface/Cable	ODU: Coaxial N (F) and IDU: TNC(F) / N (M)cable (RG-8U upto 200M)
Antenna Connector	Coaxial N (F)

Management	
Protocol	SNMP
Local & Remote access	Ethernet 10Base-T (RJ-45)
External Alarms	Relay outputs, DB-25connector
Signal Level Indications	LED RSSI indicator on ODU

All technical data are subjected to change without notice.