

Crystal Communications, Ltd.
Commercial Services
Price List
January 1, 2019

Manufacturer	Model Number	Labor Category	Education-Degree General/Specialized Experience	Unit	Price
Crystal Communicatons, Ltd.	CT-001	Communications Technician I	Education: High School Diploma or GED. 3 months - 2 years of technical experience in pulling and terminating twisted pair copper cable, fiber optic cable, coaxial cable, and innerduct. Complete assigned task of pulling and terminating cable runs. Installs and test to EIA/TIA and BICSI standards. The Junior Communications Technician (Level I) duties include installing twisted pair cable, fiber optic cable, brackets, component cabinets, power supplies, networking hardware, computers, and cable trays.	Hour	\$ 60.00 DIR DISC = 2%
Crystal Communications, Ltd.	CT-002	Communications Technician II	Education: High School Diploma or GED. 1-3 years of technical experience in pulling, terminating, splicing and testing twisted pair copper cable, fiber optic cable, coaxial cable. Acts as Senior Communications Technician (Level II) in completing assigned task of pulling, terminating, splicing, and testing cable runs. Duties include splicing of cables, installation of cable connectors, installation of cables in cable trays, computers, and networking hardware. Ensures installation and testing meet EIA/TIA and BICSI standards. Leads work crews on smaller projects.	Hour	\$ 65.00 DIR DISC = 2%
Crystal Communicatons, Ltd.	CT-003	Communications Technician III	Education: High School Diploma or GED. 2-4 years of technical experience and advanced knowledge in pulling, terminating, splicing and testing twisted pair copper cable, fiber optic cable, coaxial cable. Acts as Supervisor Communications Technician (Level III) for local area and wide area network cabling projects. Responsible for directing crew to complete assigned tasks of pulling, terminating, splicing, and testing cable runs. Duties include supervision of technicians installing and splicing cabling, installing cable connectors, installing cable in cable trays, installing network cabinets and cabling hardware, installing local area and wide area network hardware. Ensures installation and testing meet EIA/TIA and BICSI standards.	Hour	\$ 75.00 DIR DISC = 2%
Crystal Communicatons, Ltd.	CP-001	Cabling Project Manager	Education: High School Diploma or GED. 5 years of technical experience and advanced knowledge in pulling, terminating, splicing and testing twisted pair copper cable, fiber optic cable, coaxial cable. Manages all aspects of site project management for local area and wide area network cabling projects. Responsible for ensuring crews adhere to quality control standards. Duties include estimation, bid review, and onsite supervision of technicians. Ensures installation and testing meet EIA/TIA and BICSI standards.	Hour	\$ 80.00 DIR DISC = 2%

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Crystal Communicatons, Ltd.	RCDD-001	Communications Distribution Designer	Education: High School Diploma or GED. BICSI certified Registered Communications Distribution Designer (RCDD). 5 years of technical experience and advanced knowledge in pulling, terminating, splicing and testing twisted pair copper cable, fiber optic cable, coaxial cable. Duties include estimation, bid review, job review, quality control and network cabling system design. Ensures company practices meet EIA/TIA and BICSI standards.	Hour	\$ 110.00 DIR DISC = 2%
Crystal Communicatons, Ltd.	NT-001	Network Technican	Education: High School Diploma or GED. 1-3 years of technical experience in applied network communications, including advanced knowledge with networking hardware equipment. Duties include designing and reviewing equipment configurations, managing implementation of network changes, monitoring trouble tickets, providing diagnosis and resolution for all network components (routers, switches, servers, desktops) and ensuring problem resolution.	Hour	\$ 125.00 DIR DISC = 2%
Crystal Communicatons, Ltd.	SNE-001	Senior Network Engineer	Education: College Degree in electrical engineering or 1-3 years technical experience in designing and developing network infrastructure and security. Duties include reviewing network performance, assisting in development of budgets and work plans, developing and implementing hardware testing and review, developing standards, guidelines, and white papers. The Senior Network Engineer will also provide techincal training and interface with vendors and carriers. Perfoms technical guidance on engineering efforts for front end devices, communications simulation, and analysis.	Hour	\$ 225.00 DIR DISC = 2%
Crystal Communicatons, Ltd.	PROJ-001	Project Manager	Education: College Degree or 8-12 years specialized experience in project development from inception to deployment, expertise in the management & control of funds and resources using complex reporting mechanisms and demonstrated capability in managing multitask contracts and/or subcontracts of various types and complexity. General experience includes information technology and/or telecommunications systems engineering and management. Functional duties include serving as project manager for large, complex projects and works with Government project representatives on technical and projects issues. Duties also include overall management of the project, providing project status reports, creating and monitoring project budgets, managing project headcount.	Hour	\$ 150.00 DIR DISC = 2%

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Crystal Communicatons, Ltd.	WCT-001	Wireless Communications Technican	Education: High School Diploma or GED. 1-2 years of technical experience and advanced knowledge in installing wireless networking hardware such as WiFi and Free Space Optics base products. Duties include installing and testing wireless hardware connectivity to copper and fiber optic cable plant, including Power over Ethernet and design and installation of any required mounting structures. Duties also include testing, troubleshooting and problem resolution of network connectivity issues.	Hour	\$ 125.00 DIR DISC = 2%
Crystal Communicatons, Ltd.	WCT-002	Wireless Communications Technican - Climber	Education: High School Diploma or GED. Certified in tower and safety rescue. 2 - 4 years of technical experience and advanced knowledge in installing wireless networking hardware such as WiFi and Free Space Optics base products. Duties include installing and testing wireless hardware connectivity to copper and fiber optic cable plant, including Power over Ethernet and design and installation of any required mounting structures. Duties also include testing, troubleshooting, problem resolution of network connectivity issues and tower climbing.	Hour	\$ 175.00 DIR DISC = 2%
Crystal Communicatons, Ltd.	WNE-001	Wireless Network Engineer	Education: College Degree or GED. 1-3 years of technical experience in applied wireless LAN communications including advanced knowledge with WiFi and Free Space Optics based networking hardware equipment. Duties include wireless site surveys, designing and reviewing equipment configurations, RF tuning, managing implementation of network changes, monitoring trouble tickets, providing diagnosis and resolution for all wireless network components (access points, controllers) and ensuring problem resolution.	Hour	\$ 200.00 DIR DISC = 2%
Crystal Communicatons, Ltd.	SWNE-001	Senior Wireless Network Engineer	Education: College Degree or 1-3 years technical experience in designing and developing Wireless network infrastructure, network management systems and security. Duties include but not limited to reviewing wireless network performance, assisting in development of budgets and work plans, developing and implementing hardware and software testing and review, conducting wireless site surveys, integrating hardware and management systems into existing network, RF tuning, developing standards, guidelines, and white papers. The Senior Wireless Network Engineer will also provide techincal training and interface with vendors and carriers. Performs technical guidance on engineering efforts for front end devices, communications simulation, and analysis.	Hour	\$ 250.00 DIR DISC = 2%

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Crystal Communicatons, Ltd.	NS-002	Network Specialist	Education: Associate Degree or related Technical Certificate from a Technical School or recognized Vocational Program or 2-4 years of experience providing technical network and/or network management support. Analyzes network requirements for organization and information systems and provides written recommendations of solutions for management's consideration. Troubleshoots existing networks and prepares network designs and installs components of networks. Submits written recommendations for software design, development, testing and implementation on local and wide area networks. Possesses technical ability to support network management in multi-vendor equipment environment.	Hour	\$ 125.00 DIR DISC = 2%
Crystal Communicatons, Ltd.	CS-001	Communications Specialist I	Education: College Degree or 4 years related experience in providing communications planning/design support. Utilizes drafting software in developing comprehensive engineering drawing packages detailing the integration of data communications equipment, including PCs, modems, multiplexers, packet switch equipment and cryptographic equipment. Participates in the analysis of proposed equipment configuraitons for adherence to interface standards. Maintains site-specific records such as schematics, drawings, and memorandum. Prepares documentation and correspondence associated with these responsibilities including CAD, Visio, Microstation, and Visual Basic.	Hour	\$ 85.00 DIR DISC = 2%
Crystal Communicatons, Ltd.	OM-002	Operations Manager	Education: College Degree in Computer Science or other related discipline. Minimum 10 years related experience with at least five years of experience specializing in supervisory and operations experience on large scale computer network systems. Knowledge of hardware, software, operating systems and associated network or telecommunications systems. Manages and coordinates the operational support activities associated with integrated computer network systems, including data, video, and voice systems. Coordinates the installation, operation, and maintenance of hardware, software, operating systems and support communications. Ensures that installation projects meet user requirements, established time schedules, and committed costs. Investigates and resolves operational problems in conjunction with other engineering and technical personnel. Designs systems, modules, and required enhancements. Possesses various system certifications including CCNP and CCNA designations.	Hour	\$ 150.00 DIR DISC = 2%
Crystal Communicatons, Ltd.	SA-001	System Administrator I	Education: College Degree or 3 years related experience in providing administration of Unix or other open systems-compliant multi-user computer systems. Must have experience working with Windows operating systems and Windows network servers. Performs systems installation and integration of computer operating system software, network software, application software, computer hardware and supporting network or telecommunication systems.	Hour	\$ 90.00 DIR DISC = 2%

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Crystal Communicatons, Ltd.	HDC	HELP DESK COORDINATOR	Education: Associates Degree or a related Technical Certificate or 2 years related experience in providing network and information systems delp desk support. Provides phone and in-phone technical and operational support to information systems and network users in the areas of electronic mail, directories, passwords, account security, standard desktop applications, network connectivity, problem logging, and corrective maintenance support. Serves as initial point of contact for troubleshooting hardware, software, workstation, network, and peripheral problems. Develops/updates maintenance status reports and records.	Hour	\$ 65.00 DIR DISC = 2%
Crystal Communicatons, Ltd.	ELECTECH	Electrician	Education: Licensed by state authority. 2-4 years of experience. Electrician duties include but not limited to: installations, operations, maintenance and repair of electrical devices including building circuits and light poles.	Hour	\$ 135.00 DIR DISC = 2%
Crystal Communicatons, Ltd.	CCBT	Bucket Truck	Hourly rate for 42 foot working height bucket truck.	Hour	\$ 100.00 DIR DISC = 2%
Crystal Communicatons, Ltd.	CCBTCREW	Bucket Truck Crew	Hourly rate for 2 man crew (Electrician, Wireless Communication Technician) working on 42 foot working height bucket truck. 2 hour minimum.	Hour	\$ 335.00 DIR DISC = 2%
Crystal Communicatons, Ltd.	PTA	Principal Technology Architect	Education: College Degree or 5-10 years technical experience in architecting, designing and developing wireless devices, network management systems and security. Duties include but not limited to developing new architectures for new technology, development of product requirements and translation to application level architecture and detailed designs, develop designs that scale and support multiple services and clients, design and document specifications and models, optimize solutions for security, performance and application scalability, collaborate with owners to ensure technical capability and efficiency.	Hour	\$ 325.00 DIR DISC = 2%